
Wesleyan University

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The Honors College

QUALITY OF LIFE AND TRANSPORTATION:

A STUDY OF MIDDLETOWN

Middletown Case
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by

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PREFACE

Now that I have finished writing this, I wish I could begin again, armed with all the things I have learned. Historical research posed several problems. Deciphering between fact and fiction was difficult. Occasionally personal recollections gave a marvellous sense of the period, which brought dry history alive, but the two did not always agree.

Finding information was a problem. When information on Middletown was unavailable, I used the nearest reference: Middlesex County, the mid-state region, the state, the northeastern states or the United States. No comprehensive history, other than the fictional work of Margarite Allis, has been written on this area, so any item of remote interest needed to be checked. A thorough examination of the Middletown Press's files could have been very helpful. Unfortunately time was a limiting factor, and the files are not indexed.

Information for the seventeenth and eighteenth centuries was scanty. The Connecticut Historical Society in Hartford, the Middletown case in Middletown's Russell Library, and the Archives in Olin Library provided the available information. However, they are set up in such a way that one needs to know what one is looking for.

The lack of information on Middletown's early history is more than compensated for by the amount of material available for the twentieth century. The library of the Mid-state Planning Agency probably has more information than all of the other sources combined.

I knew nothing about this subject when I began. I wanted to know why Middletown is no longer the lovely city which George Washington and Charles Dickens praised. I was already involved with the energy issue when I began but it was a revelation to see the connections between transportation systems and energy consumption.

The process of creating this was exciting and now that it is over, I feel as if I have just begun.

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CHAPTER I

INTRODUCTION

During the latter half of the eighteenth century Middletown was the largest and wealthiest town in Connecticut, deriving its wealth from shipping trade to foreign ports. Samuel Russell was one famous Middletown merchant whose fleet of Yankee Clippers sailed to China and the West Indies, bringing back cargo for trade at Middletown's port. That cargo provided him with the money to build Russell House, or Honors College, as it is known today. Oxen dragged the pillars gracing his front porch from New Haven to Middletown on carts. Given the poor quality of roads at that time, that trip was undoubtedly a long one.

Middletown's prosperity dwindled with the decline of the shipping trade at the beginning of the nineteenth century. The men who had invested in shipping ventures

turned to industrial investments, while the town retained a charming atmosphere of "comfort, beauty and luxury"¹.

Meanwhile poor road systems limited inland travel. Charles Dickens, said to have called High Street "the most beautiful street in America"² voyaged to Hartford on a steamboat during his travels through America. Steam power led to boat and railroad travel in the nineteenth century but Middletown did not have a railroad until it was too late to contribute to her growth.

Railroad lines were built through Middletown and then, with the discovery of electrical power late in the nineteenth century, street car systems were built as well. By the turn of the century Middletown had an impressive transportation system. Steamboats carried passengers to Hartford and New York City, railroads carried passengers to Boston and New York City, and Hartford and Saybrook, an interurban trolley system connected Middletown with other towns in Connecticut, and an electric trolley line provided Middletown with rapid and efficient service.

Today charming spots in Middletown are rare and transportation is limited to an hourly bus to Hartford, an interstate bus to New Haven and New York City or Boston, or automobile. The car now provides easy access to most places in the country. However, the number of cars has

grown to the extent that they are congesting roads and slowing movement. Since the primary objective of transportation is to ease the movement of people and goods, something has gone wrong. An historical study of transportation in Middletown can show how we have arrived at this impasse.

This study is important for future transportation in Middletown in light of the energy crisis. Since 1973 the federal government has been trying to reduce the dependence of the United States on foreign energy sources. At that time the United States, as six percent of the world's population, was consuming thirty percent of the world's resources.

However, ending our dependence on foreign sources will not solve the problems revealed in 1973. We will consume all of our energy resources by the end of the century if we maintain our present growth rate, and do not develop alternative energy sources.

The energy shortage this winter had its greatest affect on the northeast because the latter is dependent on other parts of the country for energy. One economist predicts that the Great Lakes and the Northeast regions, "already stagnating" when compared with the Sunbelt region, will suffer further in the approaching energy shortage.³

The southern coal and oil producing regions will become economically depressed. In the future, labor will be used

for production, and because men are not as efficient as energy consuming machinery, productivity will decrease.

If the northeast is already, and will continue to become, dependent on energy from the south, the most efficient use of available energy must be achieved and until we develop alternatives, we should reduce our energy consumption.

Since 1973 the United States has increased its consumption of the world's resources to forty percent. If we are going to make our use of energy efficient, transportation is the logical place to begin because it is the largest single factor in the energy budget. Transportation uses up about 25 percent of our energy with cars contributing half of that. The energy could be reduced by six percent if we double the average number of passengers in a car from 1.5 to three.⁴

A study of the development of transportation systems in Middletown may reveal solutions to the energy problem.

CHAPTER II

1650 - 1800

The Shipping Era

Middletown's colonial and post revolutionary development responded to its location on the Connecticut River. The first settler sailed here by boat, the shipbuilding industry contributed to the growth of the town, and the shipping trade brought great wealth. Trade began between Middletown and coastal ports and then expanded to foreign ports in the second half of the eighteenth century. The interruption of trade during the Revolutionary War, and through the European wars, led to the development of new sources of income, and the end of Middletown's most prosperous era.

Middletown was first discovered when Adrian Block, a Dutchman, explored the Connecticut River for the first

time in 1614.¹ He found Sequin Indians dwelling at the first major bend in the river, on which Middletown is now situated, about 38 miles from Long Island Sound. This area was known as 'the sachem of Mattabesett' which means 'carrying place, or portage'.²

Middletown's first citizens arrived by ship. In 1650 the Sequins sold Mattabesett to the governor of Connecticut. Settlers came from England, eastern Massachusetts, and other Connecticut towns. Middletown changed its name from Mattabesett in 1653, perhaps because it lies midway between Saybrook and Hartford.³ The settlers built a stockade in the area north of Washington Street.

During the colonial period Middletown grew through 'coasting' trade with settlements along the coast. In the second half of the eighteenth century, trade expanded to include the West Indies. Middletown became a distinct trading town in the lower Connecticut River Valley, although it did not rank with Boston or New York.

Early records are sparse, but when pieced together they reveal the steady growth of the town. Shipbuilding began in the winter of 1669 - 1670. By 1680 Middletown was the port for a seventy ton vessel 'the Supply' which transported cider to South Carolina. The river later became famous for its brews. In 1686 Mr. Adams, a shipwright, was granted permission to build ships 'provided' he did not obstruct

carts "at ye landing place"⁴. This was the first sign of traffic problems which have come to inundate the area.

Wharves were built in 1713 to accommodate Middletown's water traffic. By 1730 Middletown had two ships with a combined tonnage of 105 tons. The population grew from thirty families in 1652 to a size large enough for the village above the Sebeth River (now known as the Mattabesett) to support a separate parish. This village came to be known as the Upper Houses. Families of seafarers lived there and later it became the town of Cromwell. Most of the shipbuilding attributed to the Middletown district was done there in two shipyards, accompanied by the "cheerful music of adze and hammer".⁵

The first ferry began between Middletown and the parish of East Middletown on the other side of the river in October of 1726. It was a private operation run by Izrahiah Wettmore until 1737 when it was transferred to the town of Middletown.^{5a} Eventually East Middletown separated itself from Middletown as Chatham (today Portland and East Hampton).

Prior to 1750 Middletown's trade was limited to the coast. Trade with the West Indies enhanced its coastal trade and brought prosperity to the town. In 1756 Middletown was the most populous of the 68 towns in Connecticut.⁶ The number of vessels owned by Connecticut merchants in-

creased from 44 in 1731 to 74 in 1756, 114 in 1762, and 180 in 1773, with a 10,317 ton capacity.⁷ Coasting trade made up about half of the trade done in 1769. Middletown also fitted three whalers to try her success in the whaling venture, but it was unprofitable.⁸

Trade during the Revolution and the War of 1812

Middletown's trade peaked between 1793 and 1807. The trade consisted of the exchange of lumber, horses, salt, beef, and corn for molasses, sugar, rum and slaves (until the 1870's). Importation restrictions which began during the Revolution put an end to trade. The Continental Army needed provisions so exports were restricted in 1775. The British blockade of the shoreline also cut off trade with the West Indies and prevented domestic movement of provisions by water. The colonies were forced to rely on inland travel, and the inadequacy of the road system became apparent.

Privateering, the practice of auctioning captured goods, provided a trickling income to the merchants who had been dependent on trade. Mathew Talcott, Thomas Phillips and Comfort Sage were among the prominent Middletown businessmen who owned sixteen privateers.⁹

In 1785 the United States was in a severe depression because the French and British West Indies were closed to trade in 1783. There were only 25 ships trading with the

West Indies in 1789. Although import duties were made the same for all the states after the formation of the United States, smuggling continued.

Jeremiah Wadsworth was a wealthy landholder in Middletown, and an important commercial figure in North America. His views reveal the early conflict between the government and private businessmen. When customs taxes were high he suggested that he could acquire a forged document to avoid paying the tax. He rationalized the action:

this I think may be done without Difficulty or Hazard for my own part and I detest anything that looks like Smuggling in a Government that Acts upon any liberal and just principals, but in this when their Commercial regulations are so manifestly partial and Injurious - not to say Iniquitous...¹⁰

Because France and England again permitted American trade with the West Indies during the wars of 1793 and 1807, prosperity renewed in Middletown. American vessels supplied the agricultural produce which France and England could not supply while they were at war. Because diversity did not accompany the quantitative growth in Middletown's trade, there was a gradual shift in commercial enterprise.

Export records from the Connecticut Valley begin in 1795.¹¹ Middletown became a port of entry in 1799. 103 vessels from ports in the United States docked in Middletown in 1800. That year the largest number of ships (99) ever was built here. 12,000 tons of shipping were done.

The number of vessels entering Middletown fell from 151 in 1808 to 74 in 1825, while the number of vessels leaving Middletown for ports in the United States fell from 186 in 1805 to 98 in 1825. Captain Timothy Starr, who died in 1802, was one of the last merchants to sell imports in Middletown.

The Embargo placed on American exports by the United States government in 1807 (in an effort to force England and France to observe the neutrality of American ships), hurt the rejuvenating trade. There were no exports from Middletown in 1808, and only five ships were built. The resilience of the shipping industry allowed Middletown to surpass New London and New Haven in its exports after the Embargo was lifted in 1809.

When the United States reinstated a non-intercourse policy against the British in 1811, Middletown had seven ships, 21 brigs and four schooners in foreign trade, and one schooner and six sloops in the coasting trade. Hartford businessmen failed financially so Middletown men could not have fared well. They were hurt further when the United States declared war against the British, and England blockaded the coast again. After the war, trade continued with the West Indies even though France and England renewed their policy of allowing the United States to supply only those goods which they could not.

The Shift from Mercantile to Industrial Commerce

The blockades and the government imposed tariffs raising the prices of foreign goods contributed to the decline of foreign trade. In 1819 depression was rampant. Although shipping trade was 95 percent of its 1805 figure, coasting trade which had been half the tonnage of foreign trade during the prosperity, now surpassed it. Merchants began looking for new capital investments in domestic commerce and manufacturing.

The opening of the Erie Canal stimulated this conversion. Agricultural produce from the west became competitive with northeastern agricultural produce. Farmers lost their income. At the same time the power of water was discovered. Southern New England industrialized to survive economically. In the mercantile era goods were purchased with money, goods or work but the switch to industrial capitalism ended that. The dollar became the sole means of trade value.

Colonial merchants were strong individualists with little care for those who had no dollars to trade. At first the government saw them as a small sect of the community looking for special favors. Gradually "the interests of the commercial and creditor classes tended to become identified, at least in the minds of the merchants themselves, with the prosperity and well being of all classes of the community".¹²

Connecticut's settlers did not have a royal governor,

as Massachusetts's settlers did, but a group known as the 'Standing Order' which controlled political and military positions. The Order differed from an aristocracy in that a man could raise his station. Any aristocratic tendencies were religious. The Order evolved from the Calvinist belief that men are unequal and that a government of the most able is the best. The Order maintained class distinctions and opposition to democratic rule until after the Revolution.

Connecticut has been characterised as a state of steady habits.¹³ The length of time individuals held political offices attested to this. There was also a tendency for an individual to hold several offices at once which further strengthened the power structure. For Connecticut's merchants the Revolution meant the freedom to make economic transactions.

Merchants were in a position to influence every aspect of life through their investments. When Jeremiah Wadsworth died in 1804 his son retired to manage the estate of \$124,767 which included ten shares in the United States Bank, 27 in the Bank of North America, 63 in the Hartford Bank, fifteen in the Middletown Bank, as well as real estate in Middletown and public improvement stock (twenty shares in the New London and Hartford Turnpike, five in the Hartford and New Haven Turnpike, three in the Hartford and Boston Turnpike and 39 shares in the Union Company.¹⁴ His

holdings, and hence his political influence, were extensive.

Middletown businessmen, as the moneyholders, influenced all spheres of life in the town. The principal traders were Elijah and Nehemiah Hubbard, Colonel Lemuel Storrs, the Phillips, General Comfort Sage and later Joseph Alsop. Samuel Russell's trade with China and the West Indies made him very wealthy, but his shipping ingenuity did not carry over into the industrial world. Russell eventually gave his company to Henry Hubbard. George Phillips was a director of one of the first industries in the area, the Hartford Woolen Manufacturing Company, which was organized by Wadsworth in 1788. Lemuel Storrs owned 87,000 acres in Ohio and 22,260 acres in New York. Many Middletown merchants were hurt by land speculations prior to 1800.

These men invested in banks too. The Middletown Bank was authorized in 1795. Its capital reached \$500,000 in 1812. Nehemiah Hubbard and Richard Alsop were among the merchants on its board of directors. A savings bank began in 1825 and an insurance company began here which was subsumed by Aetna.

Between 1810 and 1834 Middletown merchants began investing in manufacturing industries (textile and machinery). Joseph Alsop gave up foreign trade in 1830 and began a pistol factory. The growth of the town was controlled by the men with holdings in manufacturing, transportation,

banking, insurance and public improvement projects.

Middletown was in Hartford County until 1786 when it was made the county seat of Middlesex County.¹⁵ The growth of the town warranted its incorporation. There were about 300 houses in the city by 1784. Trade which had been carried on aboard the ships had moved into the lower rooms of houses which were located near the river just above Washington Street.

In 1784 the legislature received a petition requesting that the part of Middletown which had been commercial before the war, be given city right because "keeping the highways in good repair, removing the obstructions from the river channel and many other regulations for commercial convenience were impossible without special jurisdiction".¹⁶

Public Improvement Works

Middletown had a commercial advantage over Hartford because the river below Middletown was deeper than above it. Although this enabled Middletown to become a port of entry for foreign trade, the advantage was, and remains, limited because even below Middletown dredging and marking was necessary to prevent sandbars from forming. Many vessels put in at New London to take on more freight before they headed to the West Indies, while returning boats lightened their load before the trip up the river, thus diminishing

the chances of lodging on a sandbar.

The channel between Middletown and Hartford was a minimum of five and a half feet deep because no single tributary contributes more than seven percent to the average flow of the river past Hartford. The struggle to improve it has been constant, beginning with the first petition in 1764. A lottery was held to provide buoys and markers for the sandbars in 1773. Lotteries were a necessary means of raising money because subscriptions of capital were difficult to obtain for public works.

Farmers were the majority of investors in public improvement projects although merchants held the most stock. Merchants directed the Middletown 'River Bank Lottery', held to improve the bank adjacent to the Public Road through Middletown and Long Meadow.¹⁷

Middletown was prospering so much from her position as a port on the river that Hartford became interested. Wadsworth, with the support of 57 prominent Hartford businessmen, petitioned the Assembly in 1788 for permission to dredge a ten foot deep channel between Middletown and Hartford, using tolls to defray the cost. The legislature feared a monopoly and denied the request.

In 1800 the Assembly granted Wadsworth permission to improve the channel. Before then, it was reluctant to incorporate a company for fear that the subscribers would

become liable when funds were exhausted. Only the wealthy were secure for incorporation. This reinforced the influence of the moneyed class because it could be involved in several enterprises with a minimum of time and energy, and maximum control.

The Union Company was incorporated in 1800. It agreed to charge tolls to cover the cost after it had been successful in deepening the channel. Six years later the channel was seven and a half feet deep and the company was ready to collect tolls. The claim was then made that the state did not have the right to tax travel upon its 'navigable tide waters'. Attempts were made to force passage without payment, so the Union Company built stone piers marking the sides of the channel and stretched a heavy chain between them to bar traffic.

36 attempts were made to revoke the charter but the company continued for the duration of its sixty year charter, keeping the channel between seven and nine feet deep. It spent \$45,000 until 1835 with extra money added by Hartford and a shipping company.¹⁸ Tolls were dependent upon the draught of a vessel. When technological changes increased the draught of vessels, river trade declined and more competitive methods of transportation were used.

Inland Development

Until the nineteenth century the poor quality of roads limited inland travel in Connecticut. Whitemen established roads over former Indian trails. Wider trails became necessary when packs, formerly carried on backs, were transferred to pack horses. The advent of the cart required roads.

Most land travel was done by horse. Light two-wheeled vehicles were used on the roads, but horse back was preferable to a carriage ride. Only the wealthy rode for pleasure because horses were vital to farming activities. The first pleasure carriage did not appear in Middletown until 1750.

Mary Russell lived in Middletown for three years at the turn of the century. She had moved to Middletown when her father, Samuel Russell, came to America from Europe. In her journal she spoke of horseback riding from five until eight in the morning, and of walking in the evening. "We had the American Lady with us who is a very good walker though the Ladies in this Country walk little" . The tendency never to walk a step has been called an American characteristic. After the Revolution ^{18a} French and English officers took the habit of horseback riding back to Europe.

Miss Russell led the life of a well to do young woman, partaking of the "useful as well as pleasant custom of sleighing" which "much contributes to enliven the Country

at that dreary season". She was not confined to "the very small sphere of observation" which she observed in Americans which she accurately attributed to their occupation "in the provision of a family".¹⁹

When Brissot de Warville, a Frenchman, traveled through Connecticut in 1788, he took the road from Windsor to Middletown which was the only good road in the Colony. At that time Country roads, or the King's Highways, were used for general travel and local town ways.²⁰ Travel from one landholding to another frequently involved passing through private property. If an owner refused a right of way, an individual had to petition the town, an action which usually resulted in counterpetitions and months of inaction.

In 1643 the General Court passed a law making each town in Connecticut responsible for making and mending the ways, or roads, within the town limits. If the selectmen in charge refused to lay out ways, the matter could be taken to the County Court and then the General Court if necessary. Until 1771 no appeals could be made if the selectmen refused to lay out a private road.

Under the law of 1643 town governments were charged to maintain intertown highways, but these roads were frequently neglected. In 1702 the County Court became responsible and it appointed a commission of two or three freeholders to decide what roads were necessary. The County sheriff then

called a jury to lay them out.

Surveyors were instructed to do as little damage as possible to the land of the person through whose property a road was planned because the town had to reimburse a property owner. New lands were given to a man "through whose lands the highway is wanted"^{20a} in 1654 in Middletown.

The General Court always appointed a commission to survey a road connecting towns in different counties. Each town paid for the section within its limits but they did not feel obliged to provide public roads within their bounds to connect with the King's Highways so there were many roads with no connections.

No attempts were made to improve road surfaces, a problem which still exists. Gravel was not piled up in the center as it was on turnpikes. There was no rubble foundation. Only bushes, easily removable trees and stumps were removed so stage coach drivers always carried axes. There were no culverts to drain the water off the roads so that passengers had to be ready to help ford quagmires. Generous width made up for poor road quality so that carts could weave around the stumps.

People would not cooperate in an enterprise which required the subordination of their particular rights to the general good of the community unless they could see immediate benefits to themselves.²¹ Many private ways were closed

with swinging gates, because trespassing was an issue. More consideration was given to property owners than to public convenience in the laying of a road, which was spoken of as "running from Mr. Jones' land through Mr. Clark's and Mr. Brown's, ending at Mr. Burr's".²²

The first effort to improve transportation appears in 1650 when five towns in Connecticut were required by the Colony to keep twelve horses available for public use at fixed rates. Men were required to serve two days a year laboring with their horses or oxen on road improvements. Failure to serve incurred a fine. By 1739 so many preferred to pay the fine that it was increased. By this time there were also class distinctions concerning the service requirement.

In 1735 individuals received permission to collect tolls to cover the cost of bridge construction. Towns had to take over the bridges when the time of their charter expired. A toll bridge could be changed to a free one at any time by paying the full price to the builder. After 1750 lotteries became a favorite way to raise money for public improvements because the cost of living was high, although the Assembly rarely granted permission for them to be held. The first bridge connecting Middletown and Cromwell was built in 1798.

Roads were originally built to ease the trip to church.²³

Failure to attend church was penalized. Through the eighteenth century trade rather than travel became the motive for road building. When the problem of disposing of a surplus arose, roads became commercial considerations. The road from Durham to Middletown was improved for the passage of horses and cattle en route to the West Indies.

From 1725 there was a marked increase in travel. Two or three boats were needed as ferries. Unlike bridges, ferries made money. By 1750 there were 26 public ferries in Connecticut as compared to nine in 1700.

In Middlesex County feeble efforts were made to improve the roads because communication by water was so easy. Early efforts to improve road transportation were modelled on the English method where those who used a road maintained it.²⁴ Private investors were then granted the right to make improvements. They built turnpikes, so called because a traveler had to pay a toll to turn a pike, or revolving barrier, to enter a road. These were the antecedents of our present turnpike system.

There were no legal requirements for early turnpike incorporators except that they be repealed when the original investment plus twelve percent had been repaid. Hostilities arose between towns and turnpike companies because the towns had to buy the land and necessary bridges for projected turnpikes.

Most of the early turnpikes are the essential lines of principal Connecticut highways today. It is not evident when Middletown's part in the long distance connections between Baltimore, Philadelphia, New York and Boston began. The first Boston post road began between New Haven and New London in 1684.²⁵ There was weekly postal service along the eastern coast by 1693. Mail was carried by post riders for a long time between New Haven and Hartford via Middletown. When stage coaches were re-established after the Revolution mail was carried by stage.

Washington Street was part of the Old Boston Road. The number of inns established may reveal the amount of travel through Middletown. Burnham Tavern was built on Washington Street in 1720. Timothy Bigelow opened another tavern on Main Street in 1760 which the Swathels ran from 1818 to 1826 as the stage coach office between Hartford and New Haven. They also ran a well known inn in Durham. In 1825 Mrs. Swathel opened the Central Hotel at the corner of Main and Court Streets which was later purchased by the MacDonough Hotel Corporation.²⁶

John Howard Redfield's father ran a little store in the Upper Houses (Cromwell) to supply the immediate wants of his neighbors when it was inconvenient for them to travel the two or three miles into "the City" of Middletown. John "readily inferred" that Middletown had a population "among

whom were no rich, no poor, much comfort and little luxury, great industry and little or no crime"²⁷. But it is not clear whether there was class discrimination among the transportation systems, whether travel between local towns was extensive, and how much was by water in comparison to land.

By 1812 there was a popular yellow stage coach operating within Middletown.^{27a} The 'Lady Washington', probably named in honor of Washington's visit to Middletown, was an elegant coach traveling between Middletown and Hartford three days a week and calling for passengers anywhere within city bounds. Fare was 75 cents one way or \$1.25 round trip.²⁸ Private coaches were not common, but by 1814 there were 549 pleasure carriages in Middlesex County.

A law requiring milestones in 1767 indicates travel growth. By 1795 there was a movement to improve the roads in the United States, particularly between Boston and New York. It took a week of travel all day until ten at night to make the journey, and there were only two coaches and twelve horses on the route.

At that time the journey from Middletown to New York or Boston took twenty to 24 hours. Postage was so expensive as to materially inhibit mere friendly or family correspondence. One piece of paper without an envelope cost six cents to deliver under thirty miles, ten cents between

thirty and eighty miles, twelve and a half cents for eighty to 150 miles, and 18 and 3/4 cents for 150 to 300 miles. Anything over that cost 25 cents.²⁹

In the first decade of the nineteenth century many turnpikes were built in Middlesex County. The same men who invested in banks and river improvement projects began the roads. "These roads being here made objects of private gain, and not as in England, of merely public care, they are established with avidity, on the smallest prospect of advantage".³⁰

Middlesex Turnpike which ran between Wethersfield and Saybrook was granted a charter in 1802 with a capital stock of \$18,088. The Middletown to Meriden Turnpike was granted in 1809. By 1819 thirteen turnpikes had been built with a capital stock of \$143,632. Nehemiah Hubbard was president of the Berlin Turnpike while Elijah Hubbard became a director of the Middletown to Durham and New Haven Turnpike.³¹

John Redfield captures the life of Middletown at this time in his recollections:

several vessels, mostly schooners and brigs sailed every year from Cromwell and Middletown and seldom were their wharves to be seen without one or more of these vessels loading or unloading. They usually brought small stocks of tropical fruit: oranges, limes, tamarinds and coconuts so their arrival was one of great interest to the juvenile population and happy was the lad whose near relative was captain or mate on one of those ships.

There was some coasting trade to New York and more southern ports because steam was still confined to the Hudson. The completion of a ves-

sel was a great event: a holiday of delight for kids. There were fascinations no boy could resist, or ever forget. Much later I had the joy of launching in a freight barge built for my father.

Those who have been born into these days of rapid travel by steam or electricity, can have but feeble conception of a state of society in which all these conveniences were unknown. In the period of which I write, distance had to be overcome either by horse or sailing. Most families kept horse and light wagon or two wheeled chaise. The very few who have business at places as distant as New York sail but such opportunities are only occasional, the voyage uncertain and often tedious. Long journeys are chiefly by stage. We saw much of travel on the great highway between New York and Boston. It was always an event to see the stage arrive.

CHAPTER III

1800 - 1900

Early Steamboat Years

The development of steam power in the nineteenth century led to a period of great activity on the Connecticut River. Most people traveled by steamboat because inland travel was still limited. Many businessmen tried their luck in companies which operated steamboats on the river, but while competition was stiff on the water, a more competitive mode of transportation was being developed: the railroad. Railroad building dominated the second half of the nineteenth century. Inland movement was also benefiting from the application of steam power. Middletown was caught in the middle.

By 1830 Middletown had a population of 6,892.¹ Its Main Street was bounded by hitching posts and horse blocks. Hogs, cattle and horses roamed through the streets which

were muddy in the spring and dusty in the summer. Horse back riding was 'all the style' in 1839 and the streets were filled with riders, while "the spectator daily enjoys the agreeable sight of perhaps fifteen to twenty vessels, of different sizes, moving up and down the river." 2 In the winter businessmen and industrialists practically hibernated because ice blocked travel by the river.

William J. Redfield (1789 - 1857), John Howard Redfield's father, was a marine engineer who originated the idea of tracking hurricanes.³ He shared in the development of transportation in Middletown.

The history of early steam navigation on the Connecticut River is confusing. According to John Redfield, his father, the engineer, saw Fulton's steamboat on the Hudson River while journeying to Ohio on foot. During travels to New York in the following ten years William Redfield watched the development of the marine steam engine, which spurred him to raise a small subscription for "an ingenious fellowtownsman", Franklin Kelsey.

John Redfield maintains that his father's subscription and Kelsey's tinkering produced 'the Experiment', a boat which plied between Hartford and Saybrook in 1822, and later became a tender to the 'Oliver Ellsworth', the first regular boat service on the Connecticut River provided by the Hartford Steamboat Company.

According to another source,⁴ a Boston engineer sold

his plan for a 'steam-tow-passage-boat' company on the river below Hartford in 1817. This company, the Connecticut Steamboat company, was incorporated in 1818 and built 'the Experiment', a 104 ton boat which carried little freight and did almost no towing between Hartford and Saybrook. The company ran freight between New London and Hartford two times a week before it began passenger service three times a week in 1823 between Hartford and the Jersey shore near New York City with the 230 ton 'Oliver Ellsworth'.

The patent system did not protect the rights of the first man who saw his dream of a steam propelled boat come true - John Fitch of Windsor Connecticut. Samuel Morey, also of Connecticut, was the first to improve a long distance steamboat, which he piloted from New York to Hartford in 1794. Morey received a patent for his work from George Washington in 1795 but it did not protect him from the schemes of his associates, Robert Fulton and Chancellor Livingston.⁵

Fulton and Livingston formed a monopoly which forced steamboats running from New Haven to New York to land at Port Chester and transfer passengers to their steamline. In 1819 Connecticut retaliated by passing an act which prohibited monopoly boats from Connecticut waters. The Fulton monopoly was declared unconstitutional in 1824. This enabled steamboats to land in New York City and new

boats began competing on the Connecticut River. The Hartford Steamboat Company was organized and began its service with the 'MacDonough'.

Dayton says that Redfield supervised the construction of the 'Oliver Ellsworth'. If he did, he was in association with the Connecticut Steam Boat Company and his son's recollections are hazy. The directors of the company with which Redfield worked were mainly Hartford and Middletown 'gentlemen'. A disagreement between them led to the formation of the Steam Navigation Company which operated on the Hudson River, with Redfield and a Hubbard on its board.

Disagreement could have arisen over Redfield's concern with the safety of passengers on steamboats. Boiler explosions were a problem during the early development of steamboats. Redfield proposed that barges be placed behind steamboats to carry passengers at a distance from the boilers. This was done until it proved economically unfeasible in 1829. The barges became freight carriers.

In addition to the steamboat lines there were two types of independent freight carriers on the river. Freight carriers were, and still are, vital to the commercial life of the Valley. Several individuals ran 'packets' of schooners and sloops to river ports and Boston, New York and Philadelphia, carrying shipments of freight.⁶

There were also upriver enterprises. In 1827 the

Connecticut River Company was incorporated to improve river navigation north of Hartford, in an effort to avert potential competition from New Haven, where a canal to Northampton was proposed to alleviate the town's industrial stagnation. The Connecticut River Company's directors were the same as the directors of the Hartford Steamboat Company. The venture was unsuccessful and the original capital of \$500,000 was increased to \$1,000,000 for the Connecticut River Steamboat Company, which was allowed a maximum return of six percent on interest: less than that allowed to the turnpikes.

The Steamboat Heyday

The regular boat service between Hartford, Middletown and New York City during the 1820's grew into keen competition between various lines in the 1830's. In the eighteen years between 1834 and 1851 there were eighteen boats on the river. The Connecticut Steamboat Company and the Hartford Steamboat Company began as rivals but later they united against new competitors.

Cornelius Vanderbilt offered better services and rates whenever he saw a line making a large profit on its investment.⁷ His competition on the Hudson River had given him control of its traffic so that other Hudson River steamship owners found it to their advantage to pay him to keep his boats off the river. So, he turned his attention to the

Connecticut River.

His competition began with the 'Victory' with a \$4.50 fare which under cut the fare on other lines. The subsequent rate war brought the fare down to 25 cents (including meals) at one point. In 1835 Vanderbilt put the 'Water Witch' on the river. He made an agreement with the 'old company' by which his boat took the night runs and the Hartford line's boat, the 'New England' had the day runs. Then Vanderbilt added the 'Lexington' with a \$2.00 fare. The old line met his price.

The 'New England' was in one of the worst maritime accidents ever, killing seventeen people, and the Hartford line replaced her with the 'Bunker Hill'. In 1837 Vanderbilt added the 'Cleopatra'. The competition continued "with tactics somewhat beyond the pale of good business ethics" ⁸ and with boats leaving within minutes of each other:

This is the boat [the 'Bunker Hill'] most confidently recommended, for safety, despatch, good treatment to travelers, the 'Lexington' and the 'Cleopatra' on the route oppositely without much system and at any price from one to three dollars. ⁹

Although there was a lull on the river when the railroad between Hartford and New Haven was completed in 1839, steamboat service continued. When the railroad was completed the steamboat line from New Haven to New York paid it to schedule its trains to connect with the New York boats.

The Connecticut threatened to stop in New Haven to pick up its share of traffic because it was losing business. The New Haven and New York steamboat line sold out to the Connecticut River line, which then terminated its connections with the railroad. The Hartford and New Haven Railroad retaliated by starting its own steamboat line to connect with its trains. It had been reluctant to do so until the legislature came to an agreement on such a practice.

The 'Kosciusko', nickname the 'cask-o-whiskey', began service in 1842. Her nickname symbolized a problem for the stockholders of the Connecticut River line and the Hartford line, who finally prohibited liquor on their boats in 1834. The 'Champion' replaced the 'Kosciusko' in 1845. Both she and Vanderbilt's 'Cleopatra' had glamorous steamboat lives.

By 1852 steamboat lines had reorganized. The interests of the Hartford and New Haven Company and the Connecticut River Steamboat Company were united into the Hartford and New York Steamboat Company with \$100,000 capital. "It was not a financial coup, or giant trust, but the move had overtones of security and stability, which were altogether healthy for the steamboats".¹⁰

The 'City of Hartford' was put on the river in 1852. She served for 34 years while Vanderbilt's 'Granite State' ran opposite her for fourteen years, taking a capacity

booking to New York to mourn the death of President Lincoln in 1865. Both of these boats were favorites.

By 1846 there were 2,078 vessels a year putting in in Hartford, with a freight total of 173,430 tons: 652 of these were steamboats.¹¹ Although there were only eight different steamers on the river between 1850 and 1890, business was good. The managers of the steamlines were active in developing passenger traffic. They built hotels, such as the Chaffee in Middletown, which were popular with summer visitors. Steamboating was the fashion for wealthy society. New Yorkers would travel by steamboat to their summer homes on the river.

In 1865 the Hartford and New York Steamboat Company built the 'State of New York', a sidewheeler which held 800 passengers and cost \$200,000 to build. She was the largest, most handsome and most expensive boat on the river. On her first run crowds greeted her at every landing.

First arrivals created unusual activity in Middletown:

Men and express wagons were seen hurrying to and fro, vehicles of every description, filled with happy faces came pouring into town from every direction... all looking anxiously, as noon drew on... around twelve the boat appeared (announced by cannon on Fort Hill) while the crowd cheered. ¹²

There were other enterprises on the river. Early in the 1870's M.R. Brazos was the New York agent for eight indepen-

dently owned tugs on the Connecticut river. This system was uneconomical and inspired Charles Goodrich, a Brazos employee, to organize the Hartford and New York Transportation Company in 1877, and secure a monopoly on river towing.¹³

Interaction between Steamboats and Railroads

Men with investments in river enterprises were instrumental in the slowness of the railroad development in the Connecticut River Valley.¹⁴ Although a rail line between New Haven and New London was finished in 1852, river interests delayed the construction of a bridge so that train cars had to be ferried across the river between Lyme and Saybrook. Hartford men also delayed the construction of a bridge across the river at Middletown for twenty years.

When railroads did begin to operate they only affected the river lines slightly, although a bout with typhoid hurt the tourist business for a season. The typhus was caused by the turning of the earth during the construction of the Valley Railroad line.

The Valley line saw the value of maintaining water connections between Saybrook and New York. It helped to organize the Hartford and New York Steamboat Company into the Hartford and New York Transportation Company which bought the 'State of New York' and renamed it the 'City of Springfield'.

In 1876 the 'City of Hartford' missed the opening of the Middletown drawbridge because a white shore light was mistaken for a bridge light. The railroad sued the Steam line and after a long trial both parties were made to pay for their own damages. It became a federal law that all drawbridges were to have red lights on their openings.

In 1883 the 'Granite State' burned, killing three people. Around this time Vanderbilt decided to discontinue operations on the Connecticut River because of the difficulty of navigation in low water. When it became necessary for the Hartford and New York Steamboat Company to forego shallow water business on the river, its subsidiary picked it up and connected with larger boats at Saybrook Point for New York. The Valley Railroad also decided not to continue connections and it helped the Hartford and New York Transportation Company to buy its boats.

In 1894 the Consolidated, a railroad monopoly gathered most of the Long Island Sound Steamboat lines into its system. It bought the New Haven Steamboat Company and the Hartford and New York Transportation Company and united them into the New England Navigation Company. The Hartford line was one of the last to be absorbed, and when it was, it managed its own affairs more than the other lines which were absorbed. The railroad took in shares of the Hartford and New York Transportation Company at \$80 a share against its own shares at \$200.¹⁵

Early Rail Development in Connecticut

"The town is becoming as much of a railroad center as circumstances require and the episode here narrated [Middletown's high taxes while the railroad was built] is over, leaving behind an instructive lesson for the student of municipal and commercial history"

16

Water transportation was only one of William Redfield's interests. In 1829 he wrote a pamphlet advocating railroads, despite the potential competition for his own barge line. He was involved with the construction of the Hartford and New Haven Railroad. Unfortunately Middletown did not receive the benefit of his progressive views immediately.

Until about 1825 Middletown competed with Hartford and New Haven in population and importance. The decline in river trade and the failure to secure rail service until after the Civil War led to her demise. Connecticut took a late interest in railroads because steamboats were providing satisfactory service and steamboat and turnpike lobbies were strong.

In 1833 a few Hartford and New Haven businessmen drew up a charter for a railroad between their cities. The original line was routed through Middletown but a survey showed that the necessary grades would be too steep and numerous to support that route!¹⁷ Middletown interests protested this decision while the citizens of Meriden were delighted because the line was rerouted through their town. Today Meriden has twice Middletown's population.

Financial crises in 1837 forced the Hartford and New Haven Railroad to request aid from the state for the completion of the line. The line managed to be finished without aid however, opening between New Haven and Meriden in 1838,¹⁸ and then to Hartford in 1839, where it met stages to Springfield, which connected with the Western Railroad.

A railroad connecting New York City and New Haven was not built until 1848 because the Connecticut legislature only granted charters which brought passengers to the Sound. It, or the special interest groups behind it, did not promote competition with the steamboat business to New York. Industrial interests joined to lobby for a charter which was granted in 1844. There was all rail service from New York to Boston via Springfield by 1852.

The years from 1840 to 1850 have been characterized as the railroad era.¹⁹ In 1840 Connecticut had 102 miles of railroad track. The mileage expanded five times by 1860. In 1846 the state assembly considered the proposal for the New Haven, Middletown and Willimantic Railroad which was to be part of another all rail line between New York and Boston. It was to be twenty miles shorter than the existing routes.

Edwin Johnson surveyed the line, and was the first to find a route through the Meriden Mountains and Reed's Gap. Johnson was a civil engineer involved in many enterprises, such as the Erie Canal, the Grand Central Railroad, navi-

gation between the Saint Lawrence and Missouri Rivers. He was the original surveyor of the Northern Pacific Railroad, and at one time, mayor of Middletown.²⁰

Edward and Charles Russell and Charles Alsop were on the Central Committee of the New York and Boston Railroad, which sponsored the rail line through Middletown. Its main backers were Middletown citizens who wanted Middletown to share in the benefits of a railroad. David Lyman (of Lyman Orchards ancestry) was one of its main backers. He rode on his horse to collect subscriptions for the project.²¹ Johnson predicted that revenues from the road would allow an eight percent return on the capital investment.

A joint committee of the state Senate and House of Representatives, which represented every county, deliberated for three weeks over a charter for the airline.²² The committee recognized the line as an important public work, and granted it a charter. But the opposition from the existing railroads and steamboat lines won a cancellation of the charter three weeks later. The opposition argued that a bridge across the Connecticut would be a navigational hazard, to the boats which sustained their business.

Two sources blame influential Middletown men for the late appearance of a railroad here.²³ They claim these men did not want to disturb the tranquility of the town with 'the noise, dust and discomfort' of a railroad which would run through their property.²⁴ On the contrary, these men

men felt that "the railroad would not interfere with the legitimate business of any other road" and that "as such, capital invested in it would not be lost or jeopardized by injurious competition with other lines".²⁵ Influential citizens did stall railroad development in the lower Connecticut River Valley, but they were not Middletown residents.

In the meantime, the first railroad in Middlesex County was completed in 1849 between Middletown and Berlin, where it connected with the Hartford and New Haven Railroad, with which it merged before its completion. It had been privately subscribed. For the first time industrial goods could be moved year round. Earlier the Connecticut River was frozen during the winter months and goods were taken to the Meriden Railroad station by stage coach.²⁶

America's railroads were being built without a systematic approach. During the 1850's many lines did not have enough business. The industrial revolution spurred business, but just as the railroads were beginning to revive a new period of railroad construction began which lasted from the Civil War until 1900.²⁷

The Connecticut Valley Railroad

In 1868, the same year that the Air Line's charter rights were finally granted, the Connecticut Valley Rail-

road was incorporated. Its 48 miles of track were to connect the towns from Saybrook to Hartford. Organization began in 1869 and it opened in August of 1871.

Three mortgages were necessary to build it. The first for \$1,000,000 was given by the state treasurer in 1870, the second for \$1,250,000 was given by the state treasurer in 1872, and the third was given by a life insurance company in 1873. The road was surrendered to the state treasurer in 1876. The treasurer foreclosed the first mortgage and took possession of the road in 1878, assigning Samuel Babcock, a Middletown resident, as agent. The treasurer resigned as trustee of the second mortgage. The Superior Court issued a certificate of foreclosure in 1880 because the interest on the first and second mortgages had not been paid by 1880.

The first mortgage bondholders were incorporated by an act of the legislature in 1789 as the Hartford and Connecticut Railroad Company, and under an agreement in 1882 the majority of the Connecticut Railroad's capital stock was acquired by the New Haven Railroad. The Valley trains were run to and from the New Haven station in Hartford then. In 1887 the Hartford and Connecticut Railroad Company leased its road to the New Haven Railroad for 99 years.

The New Haven acquired all stock in 1892 and the Hartford and Connecticut Valley Railroad transferred all of its property to the New Haven when it ceased to exist as

a separate corporation.²⁸

The New Haven, Middletown and Willimantic Railroad

When the New Haven, Middletown and Willimantic Railroad (or Air Line) finally received its charter, construction began immediately. The road was complete from New Haven to Middletown by 1870. The New Haven Railroad turned to private subscriptions for the Air line in 1871 when there was no possibility of town or Wall Street aid. The road to East Hampton was finished by 1872, and the entire fifty mile track to Willimantic was done by 1873. By this time Middletown's population had grown from 8,620 in 1860 to 11,143.

The Air line cost \$6,000,000 to build. Middletown contributed \$897,000 and purchased common stock of \$1,137,000, for which long term city bonds were floated. Unfortunately the road was a poor investment. Its mortgages were foreclosed in 1875; wiping out the entire value of the donations and the common city stock. The New Haven Railroad contracted with the Air line in 1889 to combine the gross earnings of the two roads, permitting the New Haven to set fares, times and the number of trains to be run. In 1882 the New Haven leased it, paying the interest upon the bonds and four percent of its preferred stock. The New Haven became responsible to the public

for the maintenance and administration of the Valley road. The daily trains were well patronized but the New Haven Railroad system soon had four routes between New York and Boston, in whole or part.

Before the New Haven bought the Air line, bonds for \$3,623,250 were issued for improvements, few of which were made. Thus the New Haven absorbed about \$2,000,000 which belonged to the Air line.²⁹

Middletown's people greeted new trains as they had greeted new steamboats:

At 11:30 the train crossed the iron bridge spanning the Connecticut, amid salutes from steam whistles and the joyous ringing of the church and factory bells in the City.

the arrival of the Bay State ³⁰

Middletown's railroads were an integral part of the entire New England rail system. Railroads were first financed by stocks, but in the 1850's, and after the Civil War, bonds were more prevalent. Stock investments were too risky. Ownership of railroads was diffuse but control was concentrated, as it had been with earlier public improvement works. Seven of every three hundred people in Connecticut had a share in the New York, New Haven and Hartford Railroad, but the majority of its stock was owned by people out of state. ²⁹ Middletown people were stockholders in the Hartford and New Haven Railroad in 1864.³¹

With the exception of the Hartford and New Haven, New

England's railroads as a whole were charging below the cost of operation (3¢ a mile). These were the lowest rates in the country. Lower rates were given to regular customers and until 1889 legislators had the privilege of riding for free on the Hartford and New Haven. Mileage books which paid for 1000 miles were very popular. The railroads adopted a practice of stagecoach and ferry enterprises: single tickets for through travel were cheaper than those for local travel.

Competition among New England Rail Systems

Connecticut's legislature was struggling with the problems of free trade. It permitted connecting, or intersecting railroads to lease each other but not to consolidate their stock in 1869 but by the 1880's non-competing roads were permitted to unite their stock into one corporation. The Connecticut commission "gasped" that it should have the power to decide if the public exigency would be better served by a single enterprise:

If public companies, i.e. railroad corporations, gas companies, water companies, manufacturers, etc. are to be conducted by private enterprise and capital, they should be left in the hands of their managers until they abuse the public.

32

In 1872 Connecticut's most powerful railroads, the Hartford and New Haven, and the New York and New Haven,

merged into the New York, New Haven and Hartford Railroad, sometimes called the Consolidated and to be spoken of as The New Haven from here on. The New Haven used its power as the only rail entrance into New York from New Haven, to win a rail entrance into Boston.

Most of New England's railroads were controlled by the New Haven or its arch rival, the New York and New England. When the New Haven leased the Air line in 1789 it had to exchange traffic with the New York and New England at Willimantic. However when the New Haven leased the New York, Providence and Boston Railroad in 1892 it had its own route to Boston. It leased the Air line to the New York and New England and then began to draw traffic from the Air line with its new shore line.

When the New Haven was threatened by the New York and New England it reduced its fare to 2.5 cents a mile. Railroad administrators were reluctant to admit the likelihood that reduced fares were related to an increase in business even when they lowered fares in the 1870' and 80's.

Meanwhile railroads were not competing with steamboat lines because rates on the latter were so low. In 1868, when the Air line charter was granted, 9/10ths of the through traffic between New York and Boston went by steamboat. 2/3rds of the New Haven's revenue came from local passenger traffic.³³ 3/5ths of the New Haven's revenue in 1887 came from the

same source. The New Haven began high speed luxury service for the well to do to increase through traffic. The Air Line was the most popular. It began with the New England Limited in 1884 whose six hour run was seven hours shorter than the steam lines on the Sound.

The Limited stopped running in 1890 because the New Haven prohibited the New York and New England from access to New York City on its tracks. When this ploy was reversed in 1891, the Limited was fitted with white and gold trim and brought back as the White Train.

The lords of New England's finance conferred together "over Lawrence's Medford rum and Overland cigars or read in the Boston Evening Transcript about the empires of steel and rail being built by Andrew Carnegie and J. P. Morgan"(34) while traveling on the White Train which, not surprisingly, came to be known as the Ghost Train.

These lavish expenditures probably contributed to the financial setbacks suffered by the New York and New England. The Philadelphia and Reading Railroad bought the New York and New England in 1895 but three years later it went bankrupt. Its stock was assessed at twenty dollars a share and put on the market. J.P. Morgan, acting secretly for the New Haven, bought most of the stock, and by 1895 the New Haven controlled its former rival.

The White Train was then discontinued for reasons of cleanliness and the New Haven ran the Air Line Limited in

its place. The Air line was then the quickest route to Boston, taking only five hours. Trains were begun and withdrawn faster than timetables could be printed during this period.

H.L. Goodwin was a consumer advocate who fought to reduce rail rates by showing that securities were heavily watered and did not embody a real equity entitled to the earnings. Until the 1870's stock watering, or the capitalization of earnings was a common procedure. In 1869 the New Haven had a capitalization of \$16,878,900 of which \$4,129,862 was watered stock. Goodwin harrassed the New Haven with questions about its practices, requesting open annual reports, a limitation on passes, reduced fares and conservative financial practices.

Meanwhile an important change had occurred. Coal power had supplanted water as a power source. Coal was then essential to New England's economy. The railroads debated the feasibility of all rail transportation between mines and New England destinations when water transportation became faster and cheaper via coal barge. The southern New England railroads decided to carry coal inland from ports rather than share low rates. "Unless rail rates on coal were low, New England's industry would drift to the seaboard where it could unload its coal directly." 35 There was some doubt as to whether the gravitational pull of cheap coal would cease at New England's doorstep. New

Englands industry might move west and south; but meanwhile the railroads focussed on their immediate profits.

The Inland Travel System

The condition of roads did not improve much through the nineteenth century because railroads and steamboats provided adequate transportation. Inland travel was greater over the public roads than over the private turnpikes. The Middletown, Hartford and New Haven Turnpike averaged only one percent above the cost of repairs during its first four years of operation. Gradually turnpikes ceased operations.

Meanwhile the building of roads and bridges stimulated travel more than the transfer of goods. Many companies which were incorporated between 1803 and 1830 were built inland and needed good roads over which to transport their goods to a river port.³⁶ Four-fifths of all inland factories were built on turnpikes. Around 1830 there was a gradual shift from water transportation to inland transport because stage coaches were faster; but river travel became faster when steam power was applied to boats.

The classification of stage coaches as 'accommodation stages', scheduled to meet steamboats and later, trains, shows their inferiority as transportation vehicles. Turnpikes and stage lines suffered when railroads developed. Although turnpikes failed, the demand for road improvement

did not end.

Middletown had stage service on the post road between New Haven, New York, Hartford and Boston, and Providence. In 1827 a New England stage register shows a mail coach leaving Boston at one p.m., arriving in Hartford at six a.m., New Haven at two p. m. and New York at six a.m. and making steamboat connections at Hartford and New Haven.³⁷ Through stages passed through Middletown for a fare of \$11. The Middletown to Providence mail stage ran three times a week in the 1830's, leaving from the Central Hotel. By 1847 coaches were leaving Hartford daily at "five and a half a.m." and arriving in New Haven at eight a.m. to meet the steamboat leaving for New York. Stage service from New Haven to Middletown cost 75 cents.³⁸

By the mid-eighteenth century, private turnpikes had almost disappeared. The gate on the Middletown and Meriden Turnpike was removed in 1841 while the Middlesex Turnpike lasted longer, continuing after the Valley Railroad began in 1871. It too struggled until its tolls were discontinued in 1876. In the interest of insuring that turnpikes were not taken advantage of at night when toll keepers might sleep, turnpike owners allowed the toll keepers to keep tolls collected after nine p.m.³⁹

Since bridges were rare, land travelers had to be ferried across rivers and streams. In 1821 Middletown leased

its ferry to the Colchester Chatham Turnpike Company. A horse boat ferry began operating in Middletown in 1830 and then in 1852 'the Mattabesett', a steam powered ferry, began ferrying travelers across the Connecticut. The 'Portland' ferry replaced the 'Mattabesett' in 1870. It ran from six a.m. until ten at night, charging three cents per foot passenger, sixteen cents for a single team and 25 cents for a double team, regardless of weight.⁴⁰

Bridges and railroads provided rapid inland travel as well as a dream world for young children who used them as playgrounds. The Valley Railroad ran through a covered bridge over the Little River between Middletown and Cromwell. Children played around the bridge piers - "I remember being initiated into the mysteries of placing two crossed pins on the railroad track and if the passing engine did its part, the result would pass for a doll's pair of scissors." The same woman remembers taking a train to a Sunday school picnic and crossing the bridge at Lyman Viaduct - "the half hour ride seemed like hours with the depth of the gorge and the wonder of the spidery trestle".⁴¹

Bridges were not dreams to steamboat line investors, they were unfortunate realities, and they were vital to the railroads. When the railroad bridge at Middletown finally opened in 1872, with the exception of the ferry crew, pedestrians were not allowed to cross the bridge.

When the 'Portland' burned, the 'Mattabesett' was recommissioned and towed by a tug until a new steam ferry, the 'Brownstone' was operable. It operated at a loss of ten to fifteen dollars a day until the Middletown and Portland Bridge Company opened the first passenger and vehicle highway bridge across the river.

The Superior Court ruled that the Bridge Company had to pay damages to the ferry company and permitted the latter to subscribe in the bridge company's stock to the amount of damage incurred. The 'Brownstone' ferry was sold to the state of Maine. Ferries had had their charm - the 'Portland' was a classy ferry with all the comforts for men and women. Although horses jumped ship occasionally no lives were lost in the operation of the Middletown ferry.

Tolls were ascertained in the community interest:

Understand please that we are not running this bridge for health, at the same time, we want to put in a tariff and ticket schedule satisfactory to the patrons - as your company is one of the largest patrons we are sending this for your review. 42

Tolls were set an six cents for each foot passenger, eight cents per horse, twelve cents per horse wagon and driver, twenty cents for a two horse wagon, or a horse sleigh, 25 cents for anything loaded drawn by two horses or oxen, thirty cents for the same with four horses, six cents per ox, cow or mule and a penny for a sheep, pig or goat.

The techniques for road improvement developed during the nineteenth century. John McAdam perfected the use of macadam in the 1820's, but it was not until Eli Whitney, a relative of the inventor of the cotton gin, invented a stone breaker that the expense of building good roads decreased.⁴³ Viable methods, with the popularity of bicycles around 1885, led to a renewed movement for road improvements.

Middletown had several bicycle manufacturers, among them were the Munger Bicycle Company, and later, the Keating Company although by that time a new mode of transportation was developing: the automobile. The well known Keating factory came to be occupied by an automobile company, as did the Eisenhuth Horseless Vehicle Company which employed hundreds in making the old compound car.

In 1895 Connecticut took an interest in the need to provide adequate means for a growing population to travel and trade. It set up a three person commission which became the state highway commission in 1897. By this time the first horseless carriages were operating over Middletown's streets. Edwin Johnson, the Air line surveyor was responsible for the grades and curbs of Middletown's streets.

At the time the street cars began running on Main Street, it did not seem as wide as it does today because grass grew between the sidewalks (made of flat pieces of Portland

brownstone) and the road, and huge trees shaded its hitching posts.

Public transportation vehicles evolved from their predecessors. Omnibuses looked like stage coaches. Middletown experimented with an omnibus for a brief time in the 1860's but when steel or iron tracks were developed, wheels became unnecessary.⁴⁴ The first horse cars which ran on these tracks looked like omnibuses. The Middletown Horse Railroad Company was granted a charter in 1871 but its rails were not laid until 1885. It began running a year later.

Cable cars, which ran on wheels in a street trench, were developed in 1873. They coexisted with horse cars until street cars were electrified and became known as trolleys, which are run by two wires towing or 'trolleying' a vehicle on a third rail. A pole and wheel connects with overhead cables on electrically powered vehicles. Middletown's two horse teams pulled four wheeled trolley cars until an electric system was built. The Middletown Street Railway Company replaced its predecessor in 1894, running on double tracks on the business section of Main Street. It bought the Portland Street Railway Company in 1898.

During the nineteenth century Middletown continued to depend upon its river location. The harnessing of steam

power strengthened her position as a port, and the later discovery of electrical power, led to the development of new transportation systems which provided inland movement. Unfortunately Hartford businessmen were influential with the legislature so that decisions were not always made in the interest of the Middletown community. Middletown did not develop a diverse transportation system at the earliest chance, and the interests which caused that were paving the way for the ultimate disintegration of the system which finally did evolve.

CHAPTER IV

1900 1976

"we had mass transit years ago"

Stephen Straight

The Trolley System

Consolidations were as prevalent in the trolley system as they were in the railroad lines. In 1898 there were 25 separate trolley companies and by 1907 the same routes were covered by only nine companies. An interurban system provided transportation from Waterville Maine to Sheboygan Wisconsin with a twenty mile gap in New York in the early years of the twentieth century.¹ Middletown had interurban lines to Meriden, Berlin and Hartford which were operated by companies in those cities. They used Middletown's Electric Street Railway tracks to gain access to the center of town. The trip from Boston to New York by trolley took twenty hours when there were no delays. The 126.5 mile stretch from Middletown to New York cost \$1.50 while the 140.5 miles from Middletown to Boston cost \$2.07.²

Middletown's trolley system was the best of any city in the state³. Its 36 years of operation surpassed the 24 years of the average New England line⁴. Between 1895 and 1904 Middletown's Street Railway Company ran an average of six closed cars and eleven open ones⁵ on its six main routes. One could cross the highway bridge into Portland, or go to Wesleyan along Mount Vernon Street which ran along the foot of Foss Hill, or along Washington Street into Middlefield. Three lines ran from the southern end of Main Street: one to Asylum Street (today Eastern Drive), another near Russell Street and the Russell factory, and a third out to Lakeview Park and Crystal Lake⁶.

The Middletown and Meriden Traction Company was chartered in 1901 but its charter lapsed, while the Middletown and Middlefield Traction Company was chartered in 1903, also to lapse until it was built by the Connecticut Company in 1908. The Hartford and Middletown Street Railway Company was chartered in 1905 and it too was later built by the Connecticut Company. The last two companies to be chartered, the Meriden, Middletown and Guilford Electric Railway Company (to the Sound) in 1907, and the Middletown to Chester Railway Company in 1915, went through a series of lapsed and renewed charters until 1925 when they were dropped altogether⁷. Trolley service between East Meriden and Middletown began in 1907. Trolleys ran from Hartford

to Meriden, East Meriden, Westfield and Middletown on a staff system whereby they waited for signals to proceed to ensure safe passage on the railroad tracks. The Cromwell and Middletown trolley ran on the Valley tracks. When the Berlin branch was electrified in 1909, the operation was given to the Connecticut Company.

Businessmen were active in creating a market for their businesses. The managers of trolley companies promoted business by building attractions, as the steamboat line managers had done with hotels. Lakeview Park, adjacent to Crystal Lake, provided ample activities for Middletown's residents: racing, boating, swimming, roller skating, a merry go round, a small menagerie and a vaudeville show - "the vaudeville that was put on in that theater out there in that pine or hemlock grove was a whole lot better than some of the shows you see on the television today" ⁸. Sunday trolley rides were taken instead of Sunday drives. Special cars took fans out to baseball games at Pat Kidney Field.

The Connecticut Company emerged as the ruler after the consolidation of the trolley systems in central Connecticut. In the process the Connecticut Light and Power Company of New Britain absorbed the Waterbury Traction Company. The Connecticut Railway and Light Company then subsumed the former as it continued its acquisitions which were to prove financially detrimental. In 1904 the Consolidated

Railway Company was formed by further consolidation of the trolley systems, as a subsidiary of the New Haven Railroad. Middletown was included in this subsidiary. The Consolidated Railway Company then leased the Connecticut Railway and Light Company in 1906. The New Haven did not buy the latter because it had blocked off sufficient competition.

The competitive rates of the electric railways reduced the .23 rate to .10 during the first six weeks of 1896. Each electric car held about 37 people. Passenger traffic rose from 75,000 to 300,000 in 1897.⁹ Some feared that the railroad would go the way of the stage coach.

A desire for absolute control of the transportation system led Charles Mellen, the president of the New Haven, to buy up independent trolley lines. He saw them as serious rivals to the New Haven's virtual monopoly of transportation in the area¹⁰. Interurban trolleys were successful in siphoning off short haul passengers and less than car load freight from the railroad. This was perhaps the first indication that different transport systems are suited for specific needs. The New Haven felt threatened and was willing to pay high prices to secure control over its competition. This had a major affect on the New Haven's subsequent bankruptcy.

The consolidation took place so rapidly and at such a cost that the trolley system never had a chance to establish

itself as the vital system that it was. In 1907 all the street railway lines owned by the New Haven were taken over by the Thomaston Tramway Company, under the new name of the Connecticut Company. The New Haven had conveyed all but four lines to the Connecticut Company by 1910. The latter was then in command of twelve full operating divisions of uniformly painted canary yellow vehicles. The company also assumed the freight business which had been successfully generated through an experiment tried by the New Haven - the Trolley Express Company.

Although the railroads appeared relatively late in Middletown, they became an active force, providing trackage and stations for the trolleys. Interurban trolleys entered Middletown on the railroad tracks which were electrified with 600 DC volt current for both trolley and steam train operations¹¹. The Berlin and the Valley Railroads each had a station at the foot of Washington Street while the Airline station was first on Spring Street. In 1881 the Union Depot was built to serve all three railroads. It was just south of the intersection of the Valley and Airline tracks, at the east end of Rapallo Avenue. As the center of activity it served the Hartford, Middletown and Portland trolleys until its services were no longer necessary. It was torn down in 1940.

By 1909 regular trolley service between Cromwell and Middletown began, completing the Hartford line which ran

ran on the Valley line's steam tracks between Cromwell and Middletown. The 74 minute ride cost 75 cents. Middletown also extended its line from Griswoldville to Rocky Hill in 1909. The trolley to Meriden ran every 43 minutes and cost 15 cents¹² while the Asylum line ran every half hour and the Berlin 'electric' every hour¹³.

The Connecticut Railroad Commission, established in 1950 for passenger safety concerns, was superceded by a federal commission in 1911 - the Public Utilities Commission. In 1911 the hobble skirt, which was stitched so close to the ankle that it impeded normal walking, was in style. This posed problems for women using the trolleys because the floor of an open car was 41 inches off the ground. A person boarded by stepping up two twenty inch steps (the ordinary step is eight inches). To accommodate the fashion, the Public Utilities Commission required a double running board to be put on trolley cars. Thousands of dollars were spent to do this and the next year the hobble skirt went out of style¹⁴.

Trolley Decline and Bus Development

"The bus lines will never provoke the thrill of a trolley ride. It was a thrill in those earlier days. Folks delighted in the special rides evenings from Middletown to Portland, perhaps to Middlefield or Lakeview Park. The special cars open in the summer - the conductor walked along the running board to collect the fares. It was a thrill for the youngster to sit up front on the seat immediately behind the

motorman, there to watch him swing the control lever and step up the speed of the car on the long open stretches of gleaming rail.¹⁵

The Connecticut trolley system was shortlived. In 1913 trolley service had its highest passenger traffic with 2,436 passenger cars running over 1117.6 miles of track. During World War I the federal government operated mass transportation systems and street cars were filled.

The 'perfection' of the automobile ended the trolleys. Competition from jitneys between 1919 and 1930 began an unbelievably rapid decline in the use of the street railways (the number of street railway passenger cars shrank by 670).¹⁶ Jitneys, slang for a nickel, were small buses that carried passengers over a regular route on a flexible schedule, for a nickel. They came into use along with the car. The Connecticut Company bought its first in 1921. The same year that the first street car line was converted to a motor coach operation street railway track mileage peaked, in 1924.

There is a marked relationship between the development of the car and the decline of the trolley. Trolleys began when cars had not been perfected. During the height of trolley activity in the 1910's and 20's, cars were still prone to slow speeds and breakdowns. But as political pressure for improved roads increased and intercity travel by private car became feasible, the use of trolleys declined. By 1914 people felt that trolleys had been

around forever. New cars were alluring.

The trolley indirectly set the stage for present traffic problems because it allowed the decentralization of the urban population into suburbs, creating rural areas with open space suitable for car travel. In Europe where trolleys are still used, growth has occurred along the trolley lines, leaving open green country between developed areas¹⁷.

The New Haven maintained its control through an elaborate bureaucratic system. The Colonial Commercial Company (incorporated in 1901) was reorganized into the New England Navigation Company in 1904. The latter was the holding company for the Connecticut Company in 1915.¹⁸

The transition from street railway systems to buses was swift. When railway tracks began to fall into disrepair in the 1920's it was cheaper to buy buses than to repair the trolleys. In 1925 bus service began between Middletown, Middlefield and Durham, but the Connecticut Company petitioned the PUC for permission to restore electric railway service on the Middletown to Middlefield line and run buses directly from Middletown to Durham on the state highway. The bus line was eventually transferred to the New England Transportation Company. In 1925 part of the Asylum trolley line was also discontinued.

Middletown's first regular bus service began running in 1927 from Middletown to Meriden, although service between

Meriden and Westfield over the steam road tracks was kept until 1931. Trolley service to Portland and South Farms was converted to bus service in 1929. The next year buses replaced trolleys between Hartford and Middletown, completing the motorization of the Middletown division. Meanwhile the Connecticut Company assumed operation of the New England Transportation Company.

The New Haven and the Connecticut Company went bankrupt in 1935. The Connecticut Railway and Lighting Company petitioned for the restoration of its real property possessed by the New Haven and the Connecticut Company, and returned to transit operations after 31 years of inactivity. By the end of 1937 all of Connecticut's street railway lines had become motor coach operations¹⁹.

The era of trolley service , almost forgotten today, was very successful. It had grown from the first operation of the Hartford and Wethersfield Horse Railroad Company in 1859, to 25 separate companies in 1897. It was displaced by a newer, "but not yet proven better means of transit"²⁰.

During World War II public transportation was at its height. Buses used in the late 1920's and 30's were returned to operation. Car carriers were converted to tractor trailers, with the carrier portion carrying passengers, who were heated by pot belly stoves. The only new buses added to the Connecticut Company in 1942 were supplied by the

Office of Defense Transportation.²¹

Declining Bus Traffic

Although bus lines were added in Middletown, passenger traffic on bus lines was in a decline. Buses began running to Long River Village in 1943, while the South Main Street bus route was extended in 1944. The seven divisions of the Connecticut Company were operating 840 buses in 1948. Declining patronage led to the discontinuance of many bus routes in the 1950's. The Middletown to Berlin and Middlefield lines were discontinued first and then the Crystal Lake route.

The Connecticut Railway and Lighting Company dropped an entire division in 1959 and the Connecticut Company dropped its Meriden and Middletown divisions which H & W Transit of Meriden purchased. The Connecticut gave up its eastern operations in 1961 while H & W Transit assumed its Long River Village run in 1962.

J.H. McMahon's Bus Service in Meriden assumed the operation of the Hartford division in 1968. It abandoned service to Portland and South Farms which the Connecticut Company wanted to buy. Meanwhile Edward P. Hayes took over the McMahon bus service in 1969 and ended Middletown to Meriden service.

In 1964 the Connecticut Company was sold to E. Clayton Gengras for \$3,225,000. Gengras replaced 220 buses over

the next four years in an effort to expand services and revive bus passenger traffic. He offered shopper specials and industrial flyers, but the public was unenthused. 25 people a day was a good average for his buses.

Buses have been providing transportation to people without cars. As more people switch to cars, the drop in passengers causes a bus operator to raise the fare to maintain revenue, which forces a further drop in passengers and ultimately a reduction in routes, which will force those without cars to purchase them.

River Traffic since 1900

When the New Haven began absorbing transportation concerns in southern New England under Charles Mellen, the Hartford Steamboat line was the last to be subsumed and it continued to have certain privileges not given to other New Haven subsidiaries. Round trip to New York cost \$2.50 in 1911, with the 'Hartford' and 'Middletown' running daily. But people were growing tired of them, they had been running for 34 years whereas cars were new.

In an effort to revive the steamboat business the New Haven spent \$87,000 to refit the two boats in 1927, but plush saloons were ineffectual when wharves were rotting.²² The 'Hartford' made her last run in 1931 before the New England Navigation Company, the New Haven subsidiary,

began using them for freight on the Sound. The New Haven later sold the New England Navigation Company, only to buy the Boston and Philadelphia Steamship Company so as to maintain control.²³

William Hills began working as a deck hand on a coal barge on the Connecticut River in 1890, when he was fifteen. He spent five years on the tug 'Mabel' before he became the quarter master (petty officer) on the 'Hartford'. When he was 21 he received his pilot's license and began as a pilot on the 'Onrust' before he became captain of the 'Middletown' from 1917 until 1931. The 'Middletown' brought many new model 'T' Fords up the Connecticut. Hills was still piloting oil tankers from Saybrook to Middletown and Hartford in 1948.

He found the trip up the river worthwhile for aesthetic as well as economic reasons. Mark Twain was once a passenger on Hills' boat. Hills remembers Twain exclaiming upon the fortune of living in the 'one big park' of New England. Sundays between May first and July fourth were excursion days; 860 passengers (more could have gone had there been more room) went to swim for a few hours in Saybrook for one dollar. There was always a mad scramble to clean the decks for dancing and festivities on Saturday evenings after a week of work.²⁴

The river, which once provided Middletown with most of its wealth, remains valuable to the town although it

is not recognized. The river is no longer a vital passenger traffic artery, but its freight traffic is vital to this area. Also a growing number of people are using it for pleasure boating, and one company operates an excursion line. The dredging first undertaken by the Union Company in 1800 is now done by the federal government in an attempt to maintain a fifteen foot deep channel.

The New England Steamboat Line has been running a successful excursion boat to the Sound for the last eight years. It runs between June and September with a tariff of \$9.80 for adults and \$4.90 for children. The company is building a new 'Yankee Clipper' (in honor of Samuel Russell's fleet?) for this season with a capacity for 550 people.

Until 1971 another excursion boat, the 'Dolly Madison' was docked in Middletown, but vandals forced its removal to Essex. This is interesting in remembering John Redfield's remarks about Middletown in the nineteenth century.

Most pleasure boats are kept in Portland as there is only limited docking in Middletown. There has been talk of reviving the waterfront, perhaps Middletown's greatest asset, since 1943. Such a change would be welcome. When the Yacht Club was located there, the area was lively, but since it has moved, the area is used primarily by high school and Wesleyan crews, Park Department employees who park their cars next to the old power plant, and occasional

residents, often the elderly, who fish or enjoy the view. The Lions Club created a park farther north which is not frequented.

Poor access restricts the use of the water front. A dingy and seldom used tunnel under Route 9 provides the safest access, while bicycling or walking along the access roads is both dangerous and unpleasant. It is symbolic of our time that Middletown's most beautiful spot has been sacrificed to limited access car travel. A proposed Connecticut Historic Riverway could improve the situation. Potential traffic problems have been recognized and would be dealt with if the time comes.

The river itself has been ruined by unecological habits. Poor water quality limits swimming. Kids rarely come "under the spell of that fascinating boyhood pastime, swimming" in the river, or spend "many, many days during summer vacations" rowing on the river as Frank Hallock did. How many children who live in Middletown have sailed to the Sound in a small sailboat by the time time they are eighteen?²⁵ The sole pleasure left to the river is boating and even that is limited by the poor design of the launching ramp. Also by 1990 the noise level of the cars on Route 9 will be above the acceptable level set by the Environmental Protection Agency (EPA), if the present growth in car travel continues.²⁶

In 1975 the Harbor Redevelopment Agency received a federal grant for \$750,000 contingent upon a matching fund from the city. The project was approved by a referendum last year, and bidding is now open. Proposed improvements include a boardwalk, a maritime museum, the extension of the Essex excursion train along the Valley line and several commercial ventures such as a restaurant and rental services.

Another grant, for a boat launching facility near the Commodore MacDonough Inn, has been received from the state and should be complete by the end of this year.²⁷

It is paradoxical that freight traffic on the river has reached its height in regional history while it is insignificant within the Region's economy. River borne freight has risen from five million tons in 1929 to twelve million tons in 1964²⁸. Petroleum is distributed from waterfront storage. 84 percent of Connecticut's entire fuel supply arrives by water, while the rest arrives by rail. The state's petroleum requirements are expected to rise sixty percent between 1962 and 1980.

In 1969 questionnaires on the desirability of a port in Middletown were sent to companies in the region. Most of them had a negative response because of the cost and time difference between shipments made by truck and those made by water. However a study done last month on the feasibility of a port in Portland suggests that the trend in

gas costs may have levelled the cost differences. Whatever becomes of the study, Middletown's dependence on the Connecticut River will never end.

Railroads in the Twentieth Century

to make comfort, privacy, refined enjoyment, everything in short, subservient to getting an income from every available scrap of property, such is the aim in life which material civilization is too apt to beget. J.S. Mill somewhere asks in dealing with certain economic questions if, after all, this earth is going to be a better, pleasanter place to live in after its forests have been cleared and its rough places terraced, and there is but one deadly monotony of brick and mortar, one deafening jangle of hoofs upon stone pavements from Greenland's icy mountains to India's coral strand

David Fiske

The New Haven prospered for several decades. In 1867 its net income was twice that of the nine other Connecticut railroads.²⁹ Its stock went up to \$240 a share during the railroad heyday of the early 1890's. Its interest rates on bonded security declined; fifty year bonds were issued at four percent interest. It controlled 200 enterprises and was buying up any potentially threatening transportation systems (steamboat and trolley) at a tremendous cost. New York magnates (William Rockefeller and J.P. Morgan) were filling the board of directors as Connecticut board members died.

For many years the Valley line had good passenger traffic. During the summer railroad travel was heavy because it

provided

provided easy access to shore points. Around 1900 six to eight runs a day were liked in Middletown, each train carrying about forty passengers.³⁰ There were two trains daily to Waterbury via the Berlin branch. In 1911 a special football game train to Yale was advertised in the Argus for 75 cents round trip.

Extensive uncontrolled growth subsequently undermined the New Haven's empire. In 1904 only three of the fourteen daily trains from New York to Boston were meeting costs. The 'Air Line' was withdrawn in 1903 because 'the train was so popular that it was deemed advisable to re-route it over another line.' Attempts were made to change this but the final completion of the Shore line with the construction of a railroad bridge at the mouth of the Connecticut, led to the disintegration of the New York to Boston traffic passing through Middletown.

Expansion of railroads between 1904 and 1913 led to financial disaster. The Connecticut Company was a drain on the New Haven's resources. The New Haven's income between 1907 and 1910 was insufficient to cover the cost of its acquisitions.

Railroads were acquiring large debts throughout the country. Capital stock was no longer being invested in railroads. Costs of railroad operations (largely due to labor) were rising steadily without a corresponding rise in rates and the public was unsympathetic. "Railroad

agement had been building on public will for

management had been building up public ill will for decades".³¹ This is not surprising when the railroads were buying new lines without providing adequate service on the existing ones. The director of the New Haven felt that "if we put on that train it won't be a week before people will be crowding it; then we'll have to put on another".³²

During World War I the federal government ran the railroads, until the Transportation Act of 1920 returned them to private management and gave the Interstate Commerce Commission (ICC) the power to consolidate the various rail lines into a limited number of systems. The ICC took nine years to come up with a proposal for consolidation and by that time four competing railroads had already made an agreement.

The exchange of the New Haven railroad traffic with the Pennsylvania Railroad made them a logical merger but the Pennsylvania was not interested in assuming the New Haven's debt. The New Haven's subsequent difficulties might have been avoided if it had merged with a large trunk line³³. In 1933 an Emergency Railroad Transportation Act was passed, to promote railroad economies but it accomplished little during its three year lifespan, and the New Haven went bankrupt.

By this time railroad passenger service to Middletown had ended. In 1922 an Air line midday 'through train' .

was discontinued, but protest from the Chamber of Commerce restored its run. Middletown's commuters on the 7:13 morning train to Hartford were known to be the most agreeable commuters on the system. The train used to arrive with five full cars of insurance company employees in Hartford.³⁴

The decline in railroad passenger traffic occurred simultaneously with the decline of trolley car traffic. By the late 1920's passenger traffic to Hartford on the morning train could be carried in one gas car. Through service ended in 1928 and local passenger service ended in 1933, leaving a single daily freight train going to Berlin over the Valley line. Middletown had an outstanding debt of \$370,000 for which she had to pay \$20,000 a year until 1953.³⁵ Portland requested that the state ease its debts from its investment in the Valley line which the state agreed to do with the stipulation that it would never again allow itself or its towns to invest in a railroad.

Disintegration of the Rail System

"Given the economic conditions of the thirties and the exigencies of World War II any public push toward consolidation was more than matched by a private pull away from it".³⁶ The consolidation issue was left hanging until

the 1950's. Meanwhile railroad operating efficiency was increasing. Between 1921 and 1940 the amount of coal needed to move 1000 gross tons one mile decreased from 162 pounds to 112.³⁷

During World War II the New Haven emerged from bankruptcy. Gas and steel rationing and the cessation of railroad taxes increased railroad traffic and income. The railroads managed to avoid government control, although they were subject to limited government intervention through the Office of Defense Transportation.

The war only halted the decline of passenger traffic on the railroads. Since 1929 passenger traffic has incurred annual deficits (except during the war), sometimes up to half of the net operating revenue from freight service. By 1959 national passenger traffic was below the level of 1905, while the average fare was only one cent per mile higher³⁸. Rising costs (again mainly due to labor) were a major reason for passenger deficits. Non-commuter passenger traffic on the New Haven fell from 26.6 million in 1929 to 7.4 million in 1933. It went up to 43.6 million during the war and then fell to 10.4 million in 1961. Passenger miles are more expensive than freight miles because of light density.

The New Haven's decline continued with the hurricane floods in 1955 and the completion of the Connecticut Turn-

pike in 1959. Freight income was no longer offsetting passenger losses, although passengers were paying much lower fares per mile than on any other carrier in the country, and the New Haven's freight cost 2.43 cents per ton mile compared to the national average of 1.374 cents while the New Haven's average haul was 150.5 miles compared to the national average of 257.³⁹

The New Haven was accruing a \$12,000,000 yearly deficit when the federal government ended its loans in 1961, forcing the railroad into bankruptcy. Of the New Haven's total liabilities, of \$293,000,000 in 1963 about \$40,000,000 were from federal government loans which are in default. The Connecticut Company was collateral which the federal government put up for sale.⁴⁰

Since then the New Haven, exempted from federal and state taxes, has been trying to reorganize on a profit making basis under the Bankruptcy Act. In 1962 Penn Central wished to merge with New York Central but the PUC intervened with the ICC to prevent such a merger unless the New Haven was included. Penn Central was unwilling to assume passenger service on the New Haven line without government and the ICC was unlikely to require it to do so without such aid.

Since the termination of passenger service to Middletown, the railroad lines have been used for emergencies and small excursion lines as well as freight trains. When

much of the Shore line was disrupted by the 1938 hurricane, the air line tracks were put into emergency service. The Historical Society ran a special train in 1948, and in 1967 plans for a centennial anniversary celebration sparked new interest in the railroad. The Valley line Company, headed by the skipper of the 'Dolly Madison', obtained a charter for a steam line between Essex and Deep River while the state bought track from Penn Central for \$380,000.⁴¹

The railroad had an important influence on the development of the region's economy because manufacturers were dependent upon them for receiving and shipping material. Few companies presently located on the railroad sidings are using them and most new manufacturing growth is taking place away from railroad lines. The use of synthetics, as well as the shift toward service industries in this area, has brought a decline in the variety of raw materials needed, while high terminal costs and the cheaper short haul transport offered by truck have contributed to the limited use of the railroad in the Valley.

The New Haven has been trying to develop competitive modes of freight transport since 1937 when it began using the 'piggyback' (trailer-on-flat-car) method. This has had phenomenal growth because the cars can easily be transferred to trucks for short distance hauls. 'Unit' trains, trains which carry one material to a single destination,

are also being used to carry bulk quantities of raw material. Until 1968 unit trains brought the 21,000 tons of coal needed weekly at the Hartford Electric Company (Helco).⁴²

Although railroad freight traffic is limited is is vital to the region, as the waterborne freight traffic is. In 1963 3/4ths of the 621,000 tons of freight shipped by rail into the region were coal to Helco.⁴³ The railroad was providing just enough maintenance to keep the right of way open for freight trains moving at twenty miles per hour. It was in the process of petitioning the ICC for permission to abandon all service except that to Helco and Pratt Whitney, when Helco switched over to oil as fuel in 1968 because of cost. The New Haven terminated all rail services but was ordered to resume them the following day.

The Automobile

At the turn of the century crowds still gathered at the steamboat landing to see who was going to New York. The landing 'toot' of the early morning boat was familiar to everyone. The ferry slip was near the highway bridge and during the winter months many saved ferry fare by walking and driving their teams across the river. Horse races were sometimes held on the ice east of Wilcox Island park.

Trolleys brought people to the Middlesex Theater which

was the largest stage in the northeast, outside of Boston. Hot dog stands served as 'midnight oases' for late night strollers. The trolley to Portland used to stop in the middle of the bridge for the conductor to count fares with the bridge attendant collecting tolls.

Main Street bustled with activity. George Scovill's drivers and express wagons were a familiar sight as was Tall Rufus who drove for Atwell's Livery Stable. Rigs and nags were in demand for hire. Ephraim Dixon parked his 'cab' across from the public hack stand on Court Street. George Scovill was the expressman for all the trains and he was familiar with many Wesleyan students, wishing them farewell at commencement.⁴⁴

The car was the greatest factor in the demise of the railroads and trolleys. Regional development centered around the railroad when it became an efficient transportation system, and now it centers around the highway. New companies no longer locate on railroad sidings, they settle in a spot with easy access to interstate highways.

The switch to cars in Middletown was gradual. In 1903 there were seven cars in the city. Horse drawn mowing machines were used to cut hay along the roadside. Mrs. Elizabeth Hunt (who lived to see the development of steam and electrical power) celebrated her 104th birthday in 1904 by taking a ride around the city in T. MacDonough

Russell's steam car. Her reaction was typical of the nation's reception of the car. She wanted a car of her own, horse drawn coaches would no longer suffice.⁴⁵

While almost everyone in Middletown had a horse, only a few had carriages, and only the rich had lovely rigs. Children 'hoofed' (walked) to school, jumping over hitching posts- regardless of the weather, unless their parents had a reason to be out in horse and buggy. Warren Tryon remembers going to the Haddam jail in his uncle's horse and buggy. His uncle was the sheriff of Middlesex.⁴⁶

For a boy growing up on a fashionable street in Middletown life was happy and uncomplicated. Although walks down Main Street were sometimes trying. Dean Acheson recalls his father saying "now come on Dean, we're going down to the post office". Well, I knew that was a morning shot to hell".⁴⁷ Kids tobaggoned down the street vertical to the river, all the way to Main Street. There was less traffic than so it was not too dangerous. Children also skated to the library, the gathering place, on occasion in the winter. "About the only rule was that a boy must not hang on the back of ice wagons, So we hung on the back of ice wagons".⁴⁸

Many who were children in Middletown at the turn of the century remember with fondness:

I've always said that I wished every boy could

have had the advantage of being brought up through his adolescent years in a delightful town like this where there were so many wonderful places to go.⁴⁹

At the turn of the century the inland road system was just becoming established in Connecticut. An act passed in 1907 dissolved the Middletown and Portland Bridge Company, while selling the bridge to the state for \$205,000. In 1908 the bridge tolled 219 pedestrians, 4,731 drivers and wagons, 17,248 cars (probably not many motor cars, perhaps street cars), and 31,757 three cent tolls. It is not clear what was worthy of a three cent toll, perhaps the six cent horse toll was reduced.⁵⁰

Before 1895 all Connecticut roads were constructed and maintained by towns. The Connecticut Highway Department provided limited financial aid to the towns when it was formed in 1895 (\$45,530.35 to be exact). In 1908 receipts from car fees were allocated to the highway department. The state then authorized a trunkline of fourteen state highways in 1913. Three years later, the federal government passed the first highway act in years, providing federal funds for up to half of road construction costs. Between 1916 and 1943 the federal government spent \$3,000,000,000 on the construction of national highways, paying one third of the cost while the states were paying the rest⁵¹. Gas taxes became part of the highway fund in 1924.

The number of cars and trucks lining Middletown's

Main Street curb was growing while horse and buggies were becoming things of the past. In 1915 the Bunce Company was one of the first in Middletown to buy delivery trucks. The one night circus no longer arrived by horse drawn vehicles or brilliantly colored trains, but by car.⁵²

Main Street was repaved in 1922 to accommodate the growing number of cars. Streets at that time were paved with water bound macadam (crushed stone rolled with a steam roller) which buckled with the frost and left holes "where small horses could disappear"⁵³. Clarence Lincoln began selling cars in 1929 on Church Street. By 1917 he had outgrown his space there and moved to South Main Street.

The switch to motor cars led to a need for more roads. The railroads were finding it cheaper to move people by bus over short distances, and the heavy weight of buses and trucks required more substantial roads, while their slow speed warranted several lanes so that cars could pass them. A new highway bridge over the Connecticut was authorized in 1933. Shortly after its opening the first negative aspects of the 'not yet proven better means of transit' became apparent: there was traffic congestion on Main Street.

Between 1895 and 1935 Connecticut spent \$100,000,000, with an average of \$12,000,000 a year between 1932 and 1936,

from revenues rather than bond issues with interest obligations. This sum was five times that of other states and gave Connecticut the best highway system in the country with more miles of highway persquare mile than any other state.

In 1944, a time when the railroads were supporting the country's transport needs, a National System of Interstate and Defense Highways was authorized. It did not really begin until 1956 when the National Interstate Highway Act increased federal assistance to ninety percent. Meanwhile competition among small bus lines had led to the consolidation and longer 'through' service of various lines into the Greyhound system in 1929.

The regulation of free trade has skewed the development of diverse modes of transit. Trucking operations went unregulated until 1935 when the came under the jurisdiction of the ICC, as the railroad had been for thirty years.⁵⁴ It has generally been acknowledged that competitive practices have not been equal between highway and rail carriers. This has become a major problem in the determination of future policies because the Department of Justice has been promoting competition for years while the ICC has been regulating that capacity. Railroad taxes are used to support the cost of roads while motor vehicle taxes support only themselves.

\$146,500,000 has been spent on highway in the United

States since World War II. Although road planning began in Connecticut in 1938, states could not fund extensive projects until the Federal Highway Act of 1956 increased available funds. Connecticut spent \$616,000,000 between 1946 and 1961; the amount rose from \$38,000,000 in 1950 to \$201,000,000 in 1965. The state had an outstanding debt of which \$801,000,000 were created through the sale of bonds, \$487,00,000 through self liquidating bonds and \$314,000,000 through tax revenue. The number of taxable motor vehicles in Middletown rose from 12,337 in 1960 to 18,742 in 1970 while the state's trucking revenue rose almost 300 percent.⁵⁵

There are 580 major trucking firms in Connecticut of which sixty are common carriers with revenues of \$200,000 a year. 95 percent of them are privately owned⁵⁶. Industries have been relying on trucks because of their flexible service and low cost.

Although bulk raw materials arrive in the region by rail most products are shipped out by truck. In 1970 the Atlantic Cement Company received 90,000 tons of cement by rail and shipped all of it out by truck, while the Continental Can Company shipped 20,000 of 24,000 tons of rolled steel received by rail, by truck.⁵⁷

The car has been the dominant mode of travel for the last fifty years to the extent that other transit systems

have disintegrated. With the introduction of an energy consciousness in 1973 the federal government has been advocating energy conservation so that we can reduce our dependence on foreign countries. The largest possible alteration in energy consumption could come from the transportation sector of the energy budget because transit composes 25 percent of the budget. Passenger cars make up half of that. If the average number of passengers in a car is doubled there will be a six percent reduction in consumption. If we could make the average car last three times as long as its ten year average, "which is unlikely" we would reduce the budget by another 1.1 percent.⁵⁸

Trolleys, deriving power from one central station run on coal, were far more efficient than cars. One trolley car covered up to 40,000 miles a year. They ran sixty, seventy and sometimes even eighty miles an hour. Bumper to bumper congestion on Washington Street attests to a lost era of mass transit.

In response to the energy situation, the Urban Mass Transportation Administration under the Federal Highway Administration began a program a year ago by which urban areas of 200,000 people must use a Transportation System Management plan to adopt new transportation systems. Until recently the state Department of Transportation was responsible for transit proposals and regional people only

responded to proposals. The federal government is changing that. It is meeting two thirds of the capital cost of mass transportation systems, with state and city bonds providing the other third through bond issues amortized out of general revenues. Federal aid to transportation in 1971 amounted to 62.9 percent for highways, 20.9 percent for air, 12.8 percent for water, 2.8 percent for mass transit and .6 percent for railroads. We will have to see how quickly the switch in emphasis is realized.⁵⁹

The Transportation Management is only a reviewing agency. The EPA evaluates and approves all plans. Meanwhile Connecticut's transportation fund has been merged into the general fund. Money is scarce and must be used efficiently.

The EPA evaluates a plan on the basis of environmental factors. Everything must be done to locate new highways a quarter of a mile from reservoirs to prevent contamination from chemical pollutants in roadway runoff, such as exhaust particulates, salts for snow and ice, and crankcase drippings. Barriers such as shrubbery are recommended to reduce air borne pollutants. Motor vehicles emit 60.6 percent of the total United States air pollution. Middletown has an additional interest in this because this area collects pollution from the New York area. Noise pollution is also a consideration as already mentioned. Exhaust emission controls are only a palliative. They affect the symptoms not the disease.⁶⁰

Meanwhile the cost of operating motor vehicles is rising. The average total cost of a car over a ten year period is \$18,000 compared to \$1,680 for using the bus in Hartford's first zone for ten years. The bus from Middletown to Hartford costs one dollar round trip. The bus is two or three cents a mile compared to driving costs of ten to twenty cents per mile.⁶¹

The federal highway program began in 1956 but it may not be complete until the year 2000. The 42,500 mile interstate highway system is not finished and is already costing three times more than the original estimate. \$100,000,000,000 will be spent before it is complete. Meanwhile the present system is deteriorating fifty percent faster than replacements can be made.⁶²

Middletown's traffic problems first noticed in 1939 have mushroomed with the plethora of cars in all cities. Traffic pours into the cities from arteries and there is little space ~~of~~ for them, so high rise garages are built in Middletown to house them.

Originally cities were limited in size to the distance one could cover by foot. One hour is the average walking distance so cities had a three mile radius or about 25 square miles. With faster transportation a city's radius could expand (with the street railway running eight miles per hour, a city could increase to 200 square miles).

Now cars fill the streets and slow traffic to the speed of horse drawn wagons and we don't even have the pleasure of the 'companionship of horses'⁶³. It takes one to five minutes to travel one quarter of a mile on Main Street at eleven miles per hour with the stop lights.⁶⁴

The intersection of Washington and Main Streets has reached its capacity and drivers will meet the capacity of the other intersections within ten years if the present growth rate continues. The Arrigoni Bridge reached its capacity of 30,000 vehicles in 1975 and it is expected to more than double in use by 1995. It was built to be widened and this process is in the planning stages.

Cars are contributing to urban decay. Route 66 has one off the worst traffic problems in the state and if it gets worse traffic may spill onto routes 72 and 17. Planners want to alleviate the problem by relocating the road, which Middletown's residents are against. If something is not done, the entire commercial area will be hurt. Already the area between the railroad bridge and Washington Plaza is a conglomeration of highway supported services: gas stations, specialty item fast food services and suburban shopping centers with massive parking lots. If drivers begin avoiding the area, the businesses will suffer.

Middletown used to attract shoppers from outside the city. Today one quarter of all retail purchases are

made outside Middletown. The creation of suburban shopping malls like Washington Plaza has contributed to the decline in downtown retail business. The retailers downtown have defeated proposals which would alleviate the Main Street traffic problem because they fear a loss of business. Perhaps business would improve if shoppers could enjoy walking downtown without accommodating cars when crossing the street, even if it meant parking on a side street (or in a high garage) and walking into the main street area.

Connecticut has developed as a manufacturing state, with shipbuilding, textiles, paper and metal production the leading industries in the nineteenth century. The textile industry dominated until the mid twentieth century. Its decline through the depression and World War II has depressed the economy. Middletown's growth lagged but new roads spurred its development. More recently machinery, transportation equipment and chemicals have been the predominant industries. There are now a number of small manufacturers rather than a few large ones, which gives the region a more stable economic base. Since World War II there has been a shift to service industries, with a very recent resurgence in production. Middletown planners feel Middletown needs more industry and is in a good position for it because it is the second largest city in the state in acreage, sixty percent of which is underdeveloped.

However industrial planners are only thinking in terms of highway access for further growth (Middlesex Community College was located due to its highway access). In light of the energy crisis this is not wise. Typically the motor carriage is more labor and fuel intensive than railroads for freight transit. Trucks use four times as much fuel per ton/mile of freight as railroads. The cost of trucking (due to rising labor and fuel costs) may increase relative to rail cost, which could put Middletown at a disadvantage.

Road planning is a complex process which takes up to three years. If a road is local and the city is funding it, the Planning and Zoning Commission approves a layout which the Public Works Commission carries out, to meet certain requirements. There is usually one member of the Common Council on several of the commissions to ensure a unity of vision in community projects.

If the state bureau of highways, under the Department of Transportation, plans a road through the area, it must submit a plan to the city planners who arrange public hearings, such as the ones held for Route 66. If a state project is planned, it may come under the scrutiny of the Midstate Regional Planning Agency (MRPA) which has to approve any plans which involve federal money. The Middletown Transit District, an agency to make proposals for transportation developments, was set up in 1968 but it

has been relatively inactive. It has the authority to raise money on its own for projects.

The MRPA works in cooperation with local government officials, state agencies and private operators of mass transportation services.

CHAPTER V

PROSPECTUS

Since 1973 the federal government has been advocating energy conservation so that we can reduce our dependence on foreign energy sources. It is looking for new technologies so that we can maintain our growth patterns, and suggesting palliatives for environmental pollution, rather than addressing the cause of the problem.

Technology is part of the problem when it is used in a society which glorifies quantity (we speak of the two car family), and "with it change, novelty, innovation, wealth and power".¹ We have used technology to create a need for quantitative consumption.

It has been said that we must increase our understanding of consumer demand if we are to curtail our energy consumption. Consumer demand has been manufactured by people trying to capitalize upon finite resources.

The major influences on man's welfare have been generated as byproducts of technological advance, evolved in response to a commitment to unlimited growth.

Now that growth is approaching its limits and the goals of some are affecting the very life support system of all, we can no longer make a division between private and public. Future economic, social and political practices will have to meet the limitations of our dependence on our environment, and the need to recognize and reestablish a symbiotic relationship between man and man, and man and nature.

Private interests have rarely met public needs. It cannot be denied that "an enterprise however worthwhile and pleasing cannot be maintained if revenue falls behind expenditures and dividends dry up" if dividends are the aim of transportation systems.²

If they are not we should recognize that one hundred years ago the European experience proved the absurdity of free trade in railroads. Alternative public ownership was an impossibility in America "with rings in politics and business"³ at that time.

We are learning the lesson for ourselves. In 1972 85 percent of the nation's bus services were privately owned, while the publicly owned systems were collecting 86% of the total mass transportation revenue. After a six month strike the Connecticut Company is now run by the state,

is running the company through a management company. The state pays the difference between operating revenue and cost, which is high due to labor costs.

The Regional Rail Reorganization Act (RRRA) of 1973 responded to the massive financial failure of much of the northwestern and midwest railroad systems by providing for continued essential rail service. Amtrak became responsible for the development of high speed lines in the Northeast Corridor. This service will cater to the same class of people that the Air Line catered to.

However the RRRA recognized something new. It set up a council to support the public and it provided subsidies for rail services not included in Conrail (the consolidation achieved after it was first suggested 53 years ago), provided the social, economic or environmental costs outweigh the subsidy cost. The interpretation of these costs will be vital to our future transit systems.

Each community has diverse needs and each transit system serves a particular function efficiently. Middletown once had a diverse transportation system which met the various needs of its community. Now we have reached the point where we have to accommodate our cars, rather than vice versa.

Middletown needs to reestablish a diverse transportation system for the hidden social costs as well as the energy

costs. Is it surprising that a former Middletown mayor has said that "Middletown has never figured out way to keep its young people from becoming bored"?³ There are no trolleys with friendly conductors to keep a watchful eye on itinerant youths headed to Crystal Lake. Adolescents are dependent upon their parents for transportation until they are able to get a driver's license. Then they gather in parking lots.

The Midstate Regional Planning Agency has made suggestions for the city to implement which would maximize the flow of people. All modes of transit are being dealt with as parts of a whole system. Some ideas include a flexible para-transit system which could be used where patronage is too low to support a fixed bus route. In Hartford a rail bus line might be used. It would run on existing tracks and then lower rubber tires to reach a destination.

Until mass transit is made a viable alternative to the car, the car will predominate as the means of travel. Presently an Amtrak commuter receives forty cents a day in subsidization while a person commuting in a car receives five dollars worth of daily subsidization,⁴ through the building of roads. If we do not make a change, it will ultimately be made for us. Present and future use of the car will continue congestion, poor fuel efficiency (with the possibility of fuel shortage), and hidden social and

environmental costs⁵. Middletown would be wise to adopt a transportation program which adapts to these considerations.

REFERENCES

Chapter I Introduction (pp1-4)

- ¹Centennial 1836 - 1936 (Middlesex Mutual Assurance Company) Russell Library
- ²Evan Hill, The Connecticut River (Middletown: Wesleyan University Press, 1972), p. 54.
- ³Wayne King, "Energy Shortage is said to Pose Lasting Economic Threat to North", New York Times, 1 Feb. 1977, p. 18, cols. 2-3.
- ⁴Stephen, Berry, "Reducing the Energy Demand", New York Times, 12 Feb. 1976.

Chapter II 1650 -1800 (pp 5-25)

- ¹Edwin M. Bacon, The Connecticut River (New York: G.P. Putnam's Sons, 1906), p. 7.
- ²Stephen Jenkins, The Old Boston Post Road (New York: G.P. Putnam's Sons, 1913), p. 239.
- ³Ibid., p. 241.
- ⁴Margarite Allis, The Connecticut River (New York: G.P. Putnam's Sons, 1939), p. 80.
- ⁵J.M.Morse, Neglected Period of Connecticut History (New York: States History Company, 1928)
- ^{5a}River Crossings - article in Russell Library
- ⁶Jenkins, op. cit., p. 241.
- ⁷Margaret Martin, Merchants and Trade of the Connecticut River Valley (Smith College Studies in History, Volume XXIV, 1939), p. 20.
- ⁸William Weeden, The Economic and Social History of New England (Boston: Houghton Mifflin Company, 1819) p. 748
- ⁹Martin, op. cit., p. 38.

Chapter II (pp 5 -25) cont'd

- ¹⁰Ibid., p. 49.
- ¹¹Ibid., p. 49.
- ¹²Ibid., p. 222.
- ¹³Alain D. Munkittrick, Samuel Wadsworth Russell 1789 - 1862, A Study of Ordered Investments (Wesleyan Honors Thesis, 1973)
- ¹⁴Martin, op. cit., p. 242.
- ¹⁵Connecticut Quarterly 1898 (G. Chaffee)
Russell Library
- ¹⁶Jenkins, op. cit., p. 242.
- ¹⁷Fred Dayton, Steamboat Days (New York: Library Editions Limited, 1970).
- ¹⁸W. Deloss Love, Proceedings of the American Antiquarian Society (new Series, XV, 1904).
- ¹⁸Alice M. Earle, Stage Coach and Tavern Days (London: MacMillan Company, 1902)
- ¹⁹Mary Russell's Journal written while at Middletown 1797 - 1801, Connecticut Historical Society.
- ²⁰Isabel Mitchell, "Roads and Road Making" Tercentenary Commission of State of Connecticut (New Haven: Yale University Press, 1932).
- ²⁰Frederic J. Wood, The Turnpikes of New England (Boston: Marshall Jones Company, 1919).
- ²¹Centennial, op. cit.
- ²²Hubbard Diary 1829 - 1832, Connecticut Historical Society
- ²³Hartford Times Tercentenary Edition, 1935, Russell Library
- ²⁴Wood, op. cit.

Chapter II (pp 5-25) cont'd

- ²⁵Hartford Times' Tercentenary Edition, op. cit.
- ²⁶Jenkins, op. cit., p. 245.
- ²⁷John H. Redfield, Recollections of ... (Philadelphia: Morris Press, 1900) Olin Archives
- ²⁸Allis, op. cit.
- ²⁹Karl P. Harrington, The Background to Wesleyan (Middletown: Wesleyan University Press, 1942).
- ³⁰Redfield, op. cit.
- ³¹Edward Augustus Kendall's Travels 1807 - 1808 (Isaac Riley) Russell Library
- ³²David Field, Statistical Account of the County of Middlesex (Middletown: Clark and Lyman, 1819), Russell Library.

Chapter III (pp 26-53)

- ¹Harrington, op. cit.
- ²Captain Alden Partridge, Art of Epistolary (1826) Russell Library
- ³article on William Redfield, Russell Library
- ⁴Dayton, op. cit.
- ⁵Jacobus Melancthon, The Connecticut River Steamboat Story (Hartford: Connecticut Historical Society, 1956), p. 1.
- ⁶
- ⁷Timothy Dwight, Travels in New England
- ⁸Jacobus, op. cit., p. 70.
- ⁹Ibid.

Chapter III (pp 26-53) cont'd

- ¹⁰Jacobus, op. cit.
- ¹¹Love, op. cit.
- ¹²excerpt from article on Connecticut State Hospital, Russell Library
- ¹³Dayton, op. cit.
- ¹⁴Centennial, op. cit.
- ¹⁵Dayton, op. cit.
- ¹⁶Middletown 250th Anniversary (Middletown: Tribune Company, 1900), p. 29.
- ¹⁷Matthew Edelman, The Growth and Decline of Railroads in Connecticut (Wesleyan University Honors Thesis, 1971), p. 7.
- ¹⁸Ibid, p. 9.
- ¹⁹Ibid.
- ²⁰Conversational Club Notes March 22 1880, Russell Library
- ²¹conversation with Einar A. V. Gustafson, senior editor of the Middletown Press
- ²²pamphlet - Middletown citizens reply to Hartford 1848 Olin Archives
- ²³David Epstein, Middletown Problems and Trends in Land Use Development (Wesleyan University Honors Thesis, 1958)
- ²⁴W.W. Cooney
Middletown Connecticut: A Sociological and Economic Survey (Wesleyan University Honors Thesis, 1935)
- ²⁵Convention of friends of the New York and Boston Railroad, Middletown 1847. pamphlet in Olin Archives.
- ²⁶Middlesex County - brochure in Olin Archives

Chapter III (pp 26-53) cont'd

- ²⁷ Edward Chase Kirkland, Men Cities and Transportation: A Study in New England History 1820 - 1900 (Cambridge: Harvard University Press, 1948)
- ²⁸ sheet on Connecticut Valley Railroad Russell Library
- ²⁹ Cooney, op. cit.
- ³⁰ E.A.V. Gustafson, article in Middletown Press, 28 Feb., 1948
- ³¹ Kirkland, op. cit.
- ³² Ibid., p. 258.
- ³³ Edelman, op. cit., p. 15.
- ³⁴ Kirkland, op. cit., p. 276.
- ³⁵ review of Mr. Pullman's Palace Car, article in Middletown Press, 30 Oct. 1961 in Russell Library
- ³⁶ Grace Fuller, Introduction to Connecticut History as a Manufacturing State (Smith College Studies in History, Volume VI, 1915).
- ³⁷ Badger and Porter's Stage Register XIII (Boston: James F. Howe, 1827) Connecticut Historical Society
- ³⁸ David Hoyt, Hoyt's Stage Register (Hartford: L. Skinner, 1846) Connecticut Historical Society
- ³⁹ Wood, op. cit.
- ⁴⁰ River Crossings, op. cit.
- ⁴¹ remembrances of Mary Bunce Evans Russell Library
- ⁴² Records of Middletown and Portland Bridge Company Connecticut Historical Society
- ⁴³ Forty Years of Highway Development in Connecticut 1895 - 1935, State Highway Department, Tercentenary Commission

⁴⁴Hill, op. cit.

Chapter IV (pp 54-89)

- ¹R. Patrick Stanford, Formation and History of the Connecticut Company and the Connecticut Railway and Lighting Company, 1974 in Russell Library
- ²Trolley Trips through New England and the Hudson River Valley (Hartford: The Hartford Trolley Press, 1911) Connecticut Historical Society
- ³Philip Blakeslee, Lines West in Russell Library
- ⁴George Raymond, "The Trolley System of Middletown" 1974, paper written by Wesleyan student
- ⁵Transportation Bulletin (Warehouse Point: Connecticut Valley Chapter of the National Railway Historical Society, 1957) Ct Historical Society
- ⁶Raymond, op. cit., p. 2.
- ⁷Transportation Bulletin (Warehouse Point: Ct Valley Chapter of the National Railway Historical Society, 1960) Ct Historical Society
- ⁸Raymond, op. cit., p. 4.
- ⁹George Baehr, Attempt at a Transportation Empire in New England (Michigan: Microfilms Inc, 1969), p. 239.
- ¹⁰George W. Hilton, J.F. Due, The Electric Inter-urban Railways in America (California: Stanford University Press, 1960), p. 325-6.
- ¹¹Edelman, op. cit.
- ¹²Trolley Exploring (Brooklyn Daily Eagle: 1911-1912 Edition) Ct Historical Society
- ¹³Trolley Trips through New England, op. cit.
- ¹⁴Trans. Bulletin, op. cit. 1958.
- ¹⁵"The Story of Middletown, 1650 - 1950", Middletown Press, 9 Sept. 1950.

Chapter IV (pp 54-89) cont'd

- 16 Trans. Bulletin, op. cit. 1958.
- 17 Edelman, op. cit., p. 29.
- 18 Patrick Stanford, Lines of the New York , New Haven, and Hartford Railroad Company, 1976
Russell Library
- 19 Stanford, op. cit.
- 20 Trans. Bulletin, op. cit., 1960.
- 21 Stanford, op. cit., #1 Chapter IV
- 22 Jacobus, op. cit., p. 90.
- 23 article in Middletown Press, 2 Feb 1907.
- 24 article in Middletown Press Russell Library
- 25 Middletown and the Connecticut River, 1817
piece by Frank Hallock and J McConaughy
in Russell Library
- 26 Plan for Waterfront Development, April 1974
Russell Library
- 27 Portland Waterfront Study Development (Middlesex
County Development Council, 1977)
- 28 conversation with William Kuehn Jr. of the
Harbor Redevelopment Agency
- 29 Baehr, op. cit.
- 30 Story of Middletown, op. cit.
- 31 Kirkland, op. cit.
- 32 Baehr, op. cit.
- 33 Transportation, (Connecticut Interregional Planning
Program (Hartford: Connecticut Development Commis-
sion, 1964)
- 34 Blakeslee, op.cit.
- 35 Cooney, op. cit.

Chapter IV (pp 54-89) cont'd

- 36 John F. Stover, American Railroads (Chicago, University of Chicago Press, 1961)
- 37 Ibid, p.245.
- 38 Ibid, p. 199.
- 39 James R. Nelson, Railroad Mergers and the Economy of New England (Boston: The New England Economic Research Foundation, 1966)
- 40 Transportation, op. cit.
- 41 article in transportation file of Middletown Press
- 42 conversation with R.R. Gourd at the Hartford Electric Company plant in Middletown
- 43 Midstate Regional Planning Agency figures
- 44 Story of Middletown, op. cit.
- 45 article in Middletown Press, 31 Aug 1904.
- 46 letter of 16 September 1963 from Warren Tryon Russell Library
- 47 squib on Dean Acheson in Russell Library
- 48 Ibid.
- 49 on file in Russell Library
- 50 Middletown and Portland Bridge Co., op. cit.
- 51 Jean Labatut, Wheaton J. Lane, Highways in our National Life (New York: Arno Press, 1972)
- 52 Story of Middletown, op. cit.
- 53 Judge Baldwin Reminiscences, 1968 Russell Library
- 54 Ted Van Vliet, Railroad Consolidation since 1920
- 55 Trans., op. cit.
- 56 Advisability Report for Construction of a Marine Terminal, Midstate Regional Planning Agency, 1968

Chapter IV (pp 54-89) cont'd

⁵⁷Planning Study - Relocation of Connecticut Route
66, 1972 Russell Library

⁵⁸Berry, op. cit.

⁵⁹

⁶⁰Relocation Route 66, op. cit.

⁶¹brochure from Connecticut Transit Company

⁶²article in New York Times 3 Mar 1977.

⁶³Bay Path and Connecticut Trail.

⁶⁴figures at Midstate Regional Planning Agency

Chapter V Prospectus

¹Leo Marx, "American Institutions and Ecological
Ideals", Science, Nov. 1970, p. 948.

²article in Middletown Press 24 June 1970 by Fred
Smith

³Kirkland, op. cit., p. 260.

⁴Midstate Regional Planning Agency figures

⁵United States Railway Association, VI Final System
Plan, 1975